9. MISSISSIPPI RIVER TO SABINE PASS

(1) This chapter describes the coast of Louisiana from the delta of the Mississippi River to Sabine Pass, Tex. Also discussed are Barataria, Timbalier, Terrebonne, Atchafalaya, East and West Cote Blanche, and Vermilion Bays, and the interconnecting rivers and bayous which form a network of waterways in this section of Louisiana. The deepwater port of Lake Charles as well as many smaller ports and cities are described.

(2) **COLREGS Demarcation Lines.**–The lines established for this part of the coast are described in **80.830 and 80.835**, chapter 2.

(3) **Charts 11330, 11340.–**From the delta of the Mississippi River to Sabine Pass, a distance of 250 miles, the coast has a general W trend with several deep indentations or bays somewhat separated from the Gulf by chains of long narrow islands. It is characterized by a fringe of low sandy beaches backed for many miles by vast stretches of marshy ground.

(4) The off-lying water is shoal for long distances from the beach and, except for the first 50 miles W of Southwest Pass, the 10-fathom curve is 25 to 40 miles offshore. Numerous shallow areas, irregular in outline and well out of sight of land, are serious menaces to navigation of vessels of even moderate draft.

(5) With the exception of Barataria Pass, the numerous shallow passes E of Atchafalaya Bay are dangerous to enter except during fair weather. The channels change frequently because of storms, and local knowledge is generally necessary.

(6) Calcasieu Pass is the only deep-draft channel from the Mississippi River W to Sabine Pass. An extensive network of bayous and canals with depths of 2 to 9 feet covers the country up to about 75 miles back from the coast. The waterways from Empire and Venice to the Gulf are the only canals entering the Mississippi between New Orleans and Southwest Pass.

(7) The low swampy coastal country is sparsely settled and is frequented principally by fishermen and muskrat trappers. Through the canals and bayous the bottom is deep mud, usually so soft that it is often possible to push through with drafts of about 1 foot in excess of the depths.

(8) Between Atchafalaya Bay and Vermilion River are several mounds, or islands, from which commercial salt is produced.

(9) Extensive oil exploration is going on along the coast, inland in the lakes and swamps as well as to seaward. The offshore development is expanding rapidly. The offshore derricks and structures are required to be well marked and lighted. They extend up to 125 miles offshore.

(10) Inside the 100-fathom curve from Southwest Pass to Sabine Pass the currents sets W with an average velocity of about 0.2 knot. A clockwise eddy having a velocity of about 0.2 knot covers most of the bay formed by the curving coastline between Southwest Pass and Timbalier Bay.

(11) **Weather.**–The climate along this stretch of coast is a mixture of tropical and temperate zone conditions. The area receives abundant rainfall and moderate temperatures, with only a few short periods where temperatures fall to freezing or below. The Gulf of Mexico helps modify the relative humidity and temperature conditions, decreasing the range between extremes. When S winds prevail these marine effects are increased. However, continental heat and cold waves penetrate the area at times. Port Arthur has recorded temperature extremes of 11°F and 107°F. This range narrows rapidly to seaward. During summer, prevailing southeasterlies help cool the air and produce showers.

(12) Navigation is hampered at times by extratropical or winter systems, fog, thunderstorms, and tropical cyclones. This area is located S of the mean track of continental extratropical cyclones. During winter, this track reaches its S limit, and some 15 to 20 associated fronts reach the Gulf of Mexico. These "northers" are common from October through February. The mixing of cold and warm air may also trigger the formation of an extratropical cyclone in the Gulf. The cold fronts and winter storms result in gale-force winds blowing 1 percent of the time and winds of 22 knots or more occurring 7 to 12 percent of the time. Waves of 10 feet or more are common, while 20-foot seas have been encountered. Tropical cyclones are a threat to navigation from late May into early November. On average, a tropical cyclone (winds 34 knots or more) will move through the region every 1 to 2 years, while a hurricane (winds 64 knots or more) can be expected every 4 to 5 years. Winds can be expected to reach 100 knots about every 25 years. These systems can also generate rough seas. Carla and Audrey produced 28- to 30-foot seas. On average, maximum significant wave heights of about 40 feet can be expected once every 25 years in deep waters.

(13) While fog occurs throughout the year, it is much more likely in winter and early spring; February is often the foggiest month. Port Arthur averages 42 days annually when visibilities fall below 0.4 mile. These monthly averages range from less than 1 day in the summer months to 8 days in January. Offshore visibilities fall below 2 miles about 2 to 3 percent of the time from December through April. On average, fog signals operate more than 100 hours per month in December and January. Visibilities may also be restricted by precipitation and smoke.

(14) **Charts 11364, 11361, 11358.**–From Southwest Pass to Barataria Pass, at the entrance of Barataria Bay, the shoreline is broken by numerous small passes and shallow bays, frequented only by small craft and shallow-draft vessels, and never approached by seagoing vessels.

(15) **Grand Pass,** 10 miles N of Southwest Pass, permits craft drawing up to 4 feet to proceed from West Bay via The Jump (see chapter 8) and Ostrica Canal (see chapter 7) to Quarantine Bay and Breton Sound.

(16) **Buras,** a town on the Mississippi River 21.5 miles above Head of Passes, has a boat harbor at the N end of **Bay Pomme d'Or** where open and covered berths, water, gasoline, diesel fuel, and a launching ramp are available. Ice and some marine supplies are available in the town. Numerous fishing boats operate in the waters to the W of the river. Rail, highway, and bus communications extend to New Orleans.

(17) **Scofield Bayou,** about 23 miles N of Southwest Pass, provides an entrance from the Gulf to the lakes and bayous to the S of and through the Fasterling Canal to Buras. An entrance channel was dredged in 1957. A schooner wreck is just W of the channel. Local knowledge is required.

(18) **Empire** is a small town on Doullut Canal and Empire Waterway, about 3.5 miles NW of Buras and 25.6 miles above Head of Passes. There are a number of bases for the offshore oil wells in the vicinity. A church spire N of the lock and a microwave tower S of it are prominent. Empire has several marinas. Berths, gasoline, diesel fuel, marine supplies, and launching ramps are

available. A 60-ton mobile hoist is available to handle vessels for hull and engine repairs.

(19) The State-owned Empire Waterway Lock through the Mississippi River levee at Empire is 197 feet long and 40 feet wide, and has a depth of 10 feet over the sill. Red and green traffic lights at each end of the lock should be obeyed by all vessels waiting to enter the lock. The lock foreman can be contacted on VHF-FM channel 16 and uses channel 10 as a working frequency. Overhead power cables at either end of the lock have reported clearances of about 80 feet.

(20) The **Empire Waterway** provides for a passage from the Mississippi River at Empire to the Gulf of Mexico. The waterway leads from the W end of **Doullut Canal,** which extends W from Empire Lock to **Adams Bay,** thence through **Bayou Long** and **Bayou Fontanelle,** and thence through a cut in Pelican Island to the Gulf. Passage is made directly from Doullut Canal to Bayou Long through floodgates across Bayou Long, about 1 mile below Doullut Canal. In April 1997, the controlling depths in the Empire Waterway were 5½ feet from the Mississippi River to the Gulf, thence 9 feet across the bar at the Gulf entrance. The Gulf entrance is marked by lighted buoys off the ends of the jetties and a lighted bell buoy about 1.7 miles S of the jetties.

(21) **Vessels should approach the Empire Waterway from the Gulf through the Empire Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(22) **COLREGS Demarcation Lines.**–The lines established for the Empire Waterway are described in **80.830**, chapter 2.

(23) Doullut Canal is crossed by a railroad swing bridge with a 41-foot span and a clearance of 1 foot about 0.1 mile W of its E entrance, and by a highway bascule bridge with a clearance of 3 feet immediately W of the railroad bridge. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) A fixed highway bridge with a clearance of 53 feet (55 feet for a midwidth of 100 feet) crosses the canal about 0.4 mile W of the highway bascule bridge. In 1982, it was reported that the railroad bridge was being permanently maintained in the open position.

(24) Considerable commerce in seafood, shell, petroleum products, oil well supplies, clay, drilling mud, and industrial chemicals moves on the waterway between the Gulf and Mississippi River.

(25) The waterway, in conjunction with the Ostrica Canal, offers a water route for craft across the Mississippi River Delta between Barataria Bay and Breton Sound.

(26) Another route to the Gulf from Doullut Canal with depths of about 3 feet is across Adams Bay, marked by private lights, thence through **Meyers Canal** and **Grand Bayou.** Somewhat less draft can be carried via Bayou Cook and Bastian Bay. Barataria Bay, W of Adams Bay, can also be reached from Doullut Canal by following Grand Bayou N to its junction with the Freeport Sulphur Company Canal, which connects with Lake Grande Ecaille, and then with Barataria Bay. Depths of about 3 feet can be carried to Barataria Bay.

(27) **Port Sulphur** is a small town about 11 miles above Buras on the W bank of the river. **Freeport Sulphur Company Canal** extends from the river levee to **Lake Grande Ecaille,** a distance of about 8 miles. Craft drawing up to 3 feet can pass through the lake into Barataria Bay and adjacent waters, but there is no connection with the Mississippi River. The canal is marked by private buoys. In 1979, several unlighted pile clusters were reported in the canal near the junction with Rattlesnake Bayou, in about 29°24.0'N., 89°46.3'W.

(28) Several other canals, having depths of about 3 feet, lead from behind the levees to adjacent waters and to the canneries and the highway on each side of the river, but do not connect with the river. **Socola Canal** at **Fosters Canal** (chart 11364) leads to Grand Bayou, and thence either to the Gulf or to Barataria Bay. **Wilkinson Canal** at **Myrtle Grove** (chart 11364) leads to Barataria Bay.

(29) **Vessels should approach Bastian Bay and Grand Bayou from the Gulf through Grand Bayou Pass Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(30) **COLREGS Demarcation Lines.**–The lines established for Grand Bayou Pass are described in **80.830**, chapter 2.

(31) **Bastian Bay,** 26 miles NW of Southwest Pass, is 1 to 3 feet deep. The bay is separated from the Gulf by **Bastian Island. Bastian Pass,** E of the island, is not navigable. **Grand Bayou Pass,** W of the island, is the main entrance to Bastian Bay and also to Grand Bayou. Controlling depth in the dredged channel over the bar in the pass was 6 feet in 1961.

(32) **Grand Bayou,** is used considerably by local fishing boats. On a favorable tide, about 3 feet can be carried through Grand Bayou and Meyers Canal and thence across Adams Bay to the Doullut Canal connecting with the Mississippi River at Empire, a distance of 9 miles. A depth of 3 feet can be carried to the canals along the E side of Adams Bay NW of Empire which lead to the river levee and the New Orleans-Buras Highway. This depth likewise can be taken to Barataria Bay via the Freeport Sulphur Company Canal and Lake Grande Ecaille.

(33) **Bayou Cook,** emptying into the N end of Bastian Bay, leads to Adams Bay and thence through Doullut Canal, which connects with the Mississippi River. The shallow depths across the S portion of Bastian Bay limit this route to about 2 feet on a favorable tide.

(34) **Chaland Pass** is a shallow, unfrequented pass 3 miles W of Bastian Bay.

(35) **Quatre Bayou Pass,** 5.5 miles E of Barataria Bay Light, is the approach to **Bay Ronquille, Cat Bay,** and **Lake Grande Ecaille.** The approach is marked by a lighted buoy, and the pass is marked by buoys and a light. This pass, Grand Bayou Pass to Grand Bayou, and the pass to the Empire Waterway are the only passes E of Barataria Bay used extensively by local fishermen. Bay Ronquille is separated from Cat Bay by a group of islands through which is a pass known as **Four Bayous Cutoff** about 1.3 miles NW of the light at the entrance. Bay Ronquille and Cat Bay are shallow. On a favorable tide, a depth of about 3 feet can be carried to Barataria Bay through Four Bayous Cutoff and Cat Bay. This same depth can also be taken across Bay Ronquille to Lake Grande Ecaille and thence to the Freeport Sulphur Company Canal which leads to the Mississippi River via the Doullut Canal.

(36) To enter Quatre Bayou Pass, approach the light from SE. Barataria Bay is entered by passing close E of the light and following the SW shore of Bay Ronquille for 1.3 miles to Four Bayous Cutoff. Go through this cutoff into Cat Bay, leaving some small reefs to the W. The passage from Cat Bay into Barataria Bay is about 1.1 miles NW of the cutoff. The **tidal currents** in Quatre Bayou Pass average 1.3 knots and in Pass Abel average 0.9 knot on the flood and 1.6 knots on the ebb.

(37) **Barataria Bay** is a large marsh-fringed, shallow lake, separated from the Gulf by two low, narrow sand islands known as **Grand Terre Islands.** The bay has general depths of 4 to 6 feet and is frequented chiefly by oilmen, fishermen, and oystermen,

who use launches of 3 to 4 feet in draft. Except for fishing camps, the only settlement on the bay is Grand Isle.

(38) **Charts 11358, 11352, 11367, 11365.–Barataria Waterway,** extends in a N direction from the Gulf for about 34 miles through Barataria Bay to an intersection with the Intracoastal Waterway at the towns of Barataria and Lafitte.

(39) **Vessels should approach Barataria Waterway and Bay through Barataria Pass Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(40) **COLREGS Demarcation Lines.**–The lines established for Barataria Pass are described in **80.830**, chapter 2.

(41) **Channels.–**A dredged channel leads across the bar at Barataria Pass into Barataria Bay, thence in landcuts through Beauregard, Mendicant and other islands on the W side of Barataria Bay, thence through **Mud Lake, Bayou St. Denis,** and **Bayou Cutler,** thence through a landcut known as **Dupre Cut,** and thence through **Bayou Barataria** to the Intracoastal Waterway. In March-April 2002, the controlling depth was 11 feet across the bar, thence 4 feet to Light 19, thence 5 feet to Light 43, thence 8 feet to the entrance of Bayou Rigolettes, thence 6 feet to the junction with the Intracoastal Waterway.

(42) **Barataria Pass** is the main entrance to Barataria Bay. A jetty, marked off its outer end by a private light, extends SE from the E tip of **Grand Isle** on the W side of the pass.

(43) Oil derricks are conspicuous in the general vicinity of Barataria Pass, in 5 to 10 fathoms of water. A lighted whistle buoy, about 3.2 miles SE of the end of the jetty, marks the approach to the dredged channel across the bar.

(44) In 1976, a 4-inch pipe, covered 15 feet and marked by a buoy, was reported SE of the sea buoy in about 29°13.8'N., 89°53.4'W. In 1968, a fishing boat reported striking an unidentified submerged object about 0.6 mile NW of the 4-inch pipe. A large submerged object, covered from 4 to 5 feet, was also reported about 0.5 mile west of the sea buoy; in 1969, however, a search of the area failed to reveal its existence. Mariners are advised to exercise extreme caution in this area and the surrounding area. In June 1983, a submerged piling was reported in Bayou St. Denis about 100 feet S of Daybeacon 48 in about 29°29'22"N., 90°01'00"W.

(45) Hard sandbars with from 2 to 5 feet over them extend for about 1 mile offshore on each side of the channel. The bar off the entrance channel shows in extremely heavy winds. Inside the bar, depths up to 12 feet extend N as far as **Queen Bess Island.** The tidal currents in Barataria Pass average about 1.4 knots.

(46) In June 1981, strong eddies were reported in the pass in the vicinity of 29°16.3'N., 90°57.0'W. It was reported that the eddies were more pronounced and hazardous at times of tide change.

(47) **Bayou Rigaud,** on the N side of Grand Isle, is the approach to the town of Grand Isle, 4 miles W of Barataria Pass. A dredged channel leads SW from just inside the pass for about 3.7 miles through Bayou Rigaud to the town of Grand Isle. In July 1994, the controlling depth was 9 feet to Daymark 14, thence 6½ feet to Daymark 16. It is reported that the entrance is subject to shoaling; caution is advised. A lighted range, buoys, daybeacons, and a light mark the channel.

(48) A privately marked channel leads N through Barataria Bay, E of Queen Bess Island and the daybeacon marking Shell Reef to a point SW of Big Island, thence E to Rattlesnake Bayou and the Freeport Sulphur Company Canal. About 3 feet can be carried in the channel.

(49) Former routes N through **Grand Bayou, Little Lake, Turtle Bay, Harvey Cutoff** and **Bayou Rigolettes** (see chart 11352) are little used as shoaling has occurred. Both Grand Bayou and Bayou St. Denis lead into Little Lake with depths of about 5 feet reported in 1982. This depth reportedly can also be carried across the lake.

(50) Passage to the E is possible from the junction of Dupre Cut with Bayou Cutler across **Round Lake** and **Lake Laurier** into **Lake Judge Perez.** Local knowledge is advised.

(51) **Wilkinson Canal** enters Barataria Bay about 1.5 miles E of Bayou St. Denis. The canal, 11 miles long, leads to Myrtle Grove on the Mississippi River, but does not enter the river. The canal depth is about 3 feet. Other similar canals N of Port Sulphur can be reached via Grand Bayou.

(52) From Barataria Bay the islands separating the bays from the Gulf, as well as the entrance channels between the islands, are undergoing continual changes. There are few aids to navigation, and local knowledge is necessary.

(53) Considerable commerce moves on Barataria Waterway in seafood, shell, lumber and piles, clays and drilling mud, liquid sulfur, oil well pipe and supplies, petroleum products, cement, sand and gravel, and machinery.

(54) **Grand Isle,** the only town on Barataria Bay, is in the center of a long, narrow island of the same name. Its residents, most of whom speak French, either work for the oil industry or engage in fishing. **Grand Isle Coast Guard Station** is on the NE corner of the island. Several oil companies have marine repair bases at which oil well structures and barges are built or repaired, a shipyard, and several service wharves. Many shrimp, oil well supply, and crewboats operate from Grand Isle. There is a 20-ton mobile hoist at the shipyard that can handle craft to 55 feet for hull repairs. Berths, gasoline, water, ice, marine supplies, launching ramps, and a 5-ton hoist are available at marinas near the bridge. These facilities are on Bayou Rigaud.

(55) A paved highway connects Grand Isle with the main coastal road and New Orleans via Bayou Lafourche. The local heliport is owned by an oil company. Passengers are transported to New Orleans, the offshore oil wells, or nearby oil company bases.

(56) **Pilots.–**There are no licensed pilots at Grand Isle, but local fishermen may be engaged as guides for fishing and hunting parties. Charter boat captains act as pilots on request.

(57) **Note.–**In the Barataria Bay area the name Grand Bayou appears on two bodies of water. The first is to the W of Bastian Bay, and the second is off the NW side of Barataria Bay.

(58) **Lafitte,** along the E bank of the waterway about 29 miles above the entrance at the junction of Bayous Rigolettes, Dupont, and Barataria, is a small settlement which borders the waterway for about 6 miles. Several small marinas and an oil company supply base and wharf are at Lafitte. Berths, gasoline, and diesel fuel are available. A paved highway along the E bank of the waterway connects with Lafitte, Crown Point, and New Orleans.

(59) **Bayou des Oies,** locally known as **Goose Bayou,** enters Barataria Waterway about 3.5 miles S of Lafitte. State Route 45 highway bridge crossing the entrance to Bayou des Oies has a 45-foot fixed span with a clearance of 10 feet. A large marina at the bridge and in a slip close E of the bridge has a marine lift that can handle craft to 10 tons for hull and engine repairs, or storage.

Berths, electricity, gasoline, diesel fuel, water, ice, launching ramp, and marine supplies are available at the marina.

(60) Oil and gas terminals, shrimp docks, and service wharves are on both banks of the waterways between Lafitte Village and the head of the waterway at its junction with the Intracoastal Waterway and Bayou Villars.

(61) There are several shipyards that build commercial vessels and repair commercial and pleasure craft along the E bank of the waterway at Lafitte. Boats up to about 70 feet are hauled out using marine railways or a marine lift for general repairs. Machine, wood and metal shops, and welding equipment are available.

(62) **Barataria,** on the W bank, and **Lafitte,** on the E bank, are fishing and agricultural communities at the head of Barataria Waterway. A highway bridge crossing the waterway between Lafitte and Barataria has a swing span with a clearance of 7 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) There are shrimp and oil company docks and service wharves. Gasoline, diesel fuel, water, ice, marine supplies, and berthage are available at the shipyard and at the service wharves.

(63) **Bay des Ilettes, Bay Joyeux, Bay Tambour,** and **Caminada Bay** are on the W side of Barataria Bay from which they are partially separated by low, marshy islands. These are shallow bodies of water 2 to 4 feet in depth and of the same characteristics as Barataria Bay. These bays provide approaches to the Southwestern Louisiana Canal, which connects Barataria Bay with Bayou Lafourche and Timbalier Bay. The channel through the bays is marked by privately maintained buoys.

(64) **Caminada Pass,** about 7 miles SW of Barataria Bay, connects Caminada Bay with the Gulf. The pass is little used, as every storm shifts the entrance channel. Usually a depth of 4 to 5 feet can be taken into the pass, but only 2 or 3 feet into the bay. A private light marks the jetty on the N side of the entrance. Just inside the pass, an old highway bridge with its midsection removed is used as fishing piers. A fixed highway bridge on the NE side of the fishing piers has a clearance of 14 feet for a channel width of 30 feet. An overhead power cable crossing at the bridge has a clearance of 23 feet. Another overhead power cable about 0.3 mile SW of the bridge has a clearance of 37 feet. The tidal current in Caminada Pass averages 1.5 knots with higher speeds reported. Several wrecks are in the vicinity of the pass. The pass is not recommended for strangers. In May 1986, a sunken wreck was reported close north of the fixed bridge in about 29°12'30"N., 90°02'42"W.

(65) **Charts 11340, 11358, 11359.**–The **Louisiana Offshore Oil Port (LOOP)** is a deepwater marine terminal in the Gulf of Mexico about 19 miles S of Caminada Pass. The terminal comprises an offshore pumping platform complex (PPC) and three single-point moorings (SPMs) about 1.3 miles E, SE, and S of the pumping platform complex. The pumping platform complex, marked by private lights and equipped with two fog signals, consists of a control platform connected by a walkway bridge to a pumping platform. A racon is at the pumping platform.

(66) The LOOP site is within a **deepwater port safety zone** approached through a 78-mile-long **safety fairway.** The entrance to the safety zone from the safety fairway is marked by private lighted buoys. The PPC and each SPM is within an **area to be avoided.** An anchorage area, marked by private lighted buoys, is in the NE part of the safety zone E of the PPC and SPMs. (See **150.301 through 150.345 and Annex A**, chapter 2, for limits and regulations.) The LOOP Vessel Traffic Supervisor, in addition to VHF-FM channels 10 and 74, monitors channel 16; voice call LOOP RADAR.

(67) **Caution.**–Heavy runoff from the Mississippi River may cause strong W currents, often in excess of 2 knots, in the vicinity of LOOP. These currents may sometimes be recognized by the difference in color caused by the sediment in the runoff water.

(68) **Charts 11352, 11357, 11365.– Belle Pass** (29°05.1'N., 90°13.5'W.), about 12 miles SW of Caminada Pass, is the entrance from the Gulf of Mexico to Bayou Lafourche and Pass Fourchon. The dredged channel through the pass is marked by a **012.2°** lighted range, buoys, and lights, and the approach by a lighted bell buoy. The old entrance channel between the jetties close E of the dredged channel is closed by a dam.

(69) **Vessels should approach Bayou Lafourche and Pass Fourchon through the Belle Pass Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(70) **COLREGS Demarcation Lines.**–The lines established for Belle Pass are described in **80.830**, chapter 2.

(71) **Pass Fourchon** empties into the E side of Bayou Lafourche about 2 miles above the entrance to Belle Pass.

(72) **Port Fourchon** encompasses Pass Fourchon, Belle Pass, and Bayou Lafourche for about 4 miles above its entrance. The Greater Lafourche Port Commission administers Port Fourchon. The port is the base of a large fishing fleet, offshore oil exploration and production, the Louisiana Offshore Oil Port (LOOP) operations, and some shipping interests. Public facilities at the port include a commercial fishermen's marina, an oil-field vessel dock, and recreational boats launching ramps. Other facilities available are restaurants, stores, net shops, numerous fuel docks with crane and other services, charter fishing services, seafood and ice plants, oilfield service companies, and a large repair yard. The port extends to the **Flotation Canal** on the E side of Bayou Lafourche, about 4 miles above the entrance. This canal has a reported depth of about 10 feet and has berthing for commercial fishing vessels.

(73) **Bayou Lafourche,** formerly an outlet of the Mississippi River at Donaldsonville, 70 miles above Canal Street, New Orleans, is blocked off from the river by a levee. The bayou extends from Donaldsonville in a SE direction for 93 miles, and empties into the Gulf at Belle Pass, 19 miles SW of Barataria Bay Light. The Intracoastal Waterway crosses the bayou at Larose.

(74) Bayou Lafourche is navigable to Thibodaux, about 63 miles above Belle Pass entrance. The bayou above this point is closed by a dam. In August 2001, the controlling depth was 12 feet in the bar channel through Belle Pass; thence in 1996, 9 feet to Leeville, thence 6 feet to the junction with the Intracoastal Waterway at Larose; thence in 1989-1993, 4 feet to Mathews, and thence 3 feet to Thibodaux.

(75) In November 1988, it was **reported** that the following depths, much over Federal project depths, existed in the lower part of Bayou Lafourche: 20 feet in Belle Pass and the **Port Fourchon** area, thence 12 feet to Leeville, thence 9 feet to Golden Meadow, and thence 8 feet to the junction with the Intracoastal Waterway at Larose.

(76) A floodgate is about 2.5 miles S of Golden Meadow; horizontal clearance is 56 feet with 13 feet over the sill. Another floodgate with clearances of 56 feet horizontally and 10 feet over the sill is just below the intersection with the Intracoastal Waterway at Larose.

(77) Numerous shrimp boats base at **Leeville, Golden Meadow, Galliano,** and **Larose.** Crew boats based at Leeville operate out of the bayou to the offshore oil wells. There are seafood canneries and shipyards along the bayou and oil company terminals and wharves at Leeville. There is considerable commerce on the bayou in seafood products, sugar, petroleum products, cement, lumber and piles, clays and drilling mud, liquid sulfur, sand and gravel, oil well pipe, machinery and supplies, caustic soda, chemicals, and general cargo.

(78) There are numerous private warehouses, wharves, and marine railways along the bayou. The banks of Bayou Lafourche are thickly settled throughout the greater part of its length. Lockport, **Raceland,** and **Thibodaux** are principally agricultural towns. On the lower part of the bayou there is considerable commerce in oil barges.

(79) Many bridges and overhead power cables cross Bayou Lafourche and are described in order of ascension. (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.)

(80) At **Leeville,** on the W side of the bayou about 11 miles above the entrance, a highway vertical lift bridge with a clearance of 73 feet up and 40 feet down crosses the bayou. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) There are shrimp docks, seafood packing plants, and oil company terminals and bases. Gasoline, diesel fuel, water, ice, launching ramps, and limited marine supplies are available. The Southwestern Louisiana Canal crosses the bayou at Leeville.

(81) An overhead power cable with unknown clearance crosses the bayou about 3.3 miles N of Leeville.

(82) **Golden Meadow,** 20 miles above the entrance, is the principal fishing settlement on Bayou Lafourche. A highway vertical lift bridge with a clearance of 73 feet up and 2 feet down crosses the bayou at Golden Meadow. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) A boatyard, on the W side about 0.6 mile below the bridge, has marine railways that can handle craft up to 35 feet for general repairs. A shipyard, on the W side about 2 miles below the bridge, has a marine railway that can handle craft to 145 feet for hull repairs. Gasoline, diesel fuel, water, ice, and marine supplies are available at Golden Meadow.

(83) Two overhead power cables cross the bayou between Golden Meadow and Galliano; minimum clearance is 65 feet. In 1982, the cables were reported to have been removed.

(84) At **Galliano,** about 23.5 miles above the entrance, a highway pontoon bridge crosses the bayou. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Gasoline, diesel fuel, and supplies are available at Galliano. Galliano is a **customs station.**

(85) A highway vertical lift bridge with a clearance of 73 feet up and 3 feet down and a pontoon bridge cross the bayou about 3 miles and 5.5 miles, respectively, above the pontoon bridge at Galliano. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(86) At **Cut Off,** about 30.8 miles above the entrance, a highway vertical lift bridge with a clearance of 73 feet up and 4 feet down crosses the bayou. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) On the W side of the bayou at Cut Off are several shipyards with marine railways that can handle craft up to 60 feet for repairs. An overhead power cable with a clearance of 91 feet crosses the bayou just above the pontoon bridge.

(87) At **Larose,** about 34 miles above the entrance to Bayou Lafourche, the Intracoastal Waterway crosses the bayou. Two pontoon bridges cross the bayou at Larose; one just E and the other about 0.5 mile W of the junction with the Intracoastal Waterway. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) There are two wharves on the SW side of the intersection. Larose has several shipyards and boatyards. One shipyard with a 1,500-ton floating drydock is on the Intracoastal Waterway just SW of its junction with Bayou Lafourche; general repairs can be made. Marine railways that can handle craft up to 60 feet for general repairs are available at the boatyards. Machine shops and radio repair facilities are also available. Fuel, water, ice, and marine supplies can be obtained. A shipyard builds barges on the N side of the bayou just above the intersection.

(88) Mooring to the bulkheads in the vicinity of the intersection of Bayou Lafourche and the Intracoastal Waterway is **prohibited.**

(89) Two overhead power cables cross the bayou between Larose and Valentine; minimum clearance is 68 feet.

(90) At **Valentine,** about 39 miles above the entrance, a highway pontoon bridge crosses the bayou. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Valentine has a large sugar mill and a paper mill. A shipyard that builds commercial vessels to 180 feet is on the E side of the bayou about 2 miles above Valentine. Marine railways at the yard can handle vessels to 170 feet for hull and engine repairs.

(91) **Pontoon bridges.**–The pontoon bridges that cross Bayou Lafourche at Galliano, 5.5 miles above Galliano, at Larose 0.5 mile W of the junction with the Intracoastal Waterway, and at Valentine are operated by cables that are suspended just above the water when the bridges are being opened or closed. The cables are dropped to the bottom when the bridges are in the fully opened or closed position. The pontoon bridge at Larose just E of the junction with the Intracoastal Waterway is operated by cables that are suspended just above or below the water when the bridge is being opened or closed. The cables are dropped to the bottom when the bridge is in the fully open position, but remain suspended while the bridge is fully closed. Extreme caution is advised in the area of these bridges. **Do not attempt to pass through the bridges until they are fully opened and the cables are dropped to the bottom.**

(92) State Route 3220 highway swing bridge with a clearance of 6 feet, connecting State Routes 1 and 308, crosses Bayou Lafourche about 1.5 miles below Company Canal.

(93) **Lockport,** about 44 miles above the entrance, is a town at the intersection of Company Canal with Bayou Lafourche. State Route 655 highway swing bridge with a clearance of 6 feet crosses the bayou just below the intersection. (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.) An overhead power cable with a clearance of 90 feet crosses the bayou just below the swing bridge.

(94) Lockport has a large shipyard and a boatyard. The shipyard builds boats, tugs, and barges to 176 feet. Gasoline, diesel fuel, water, ice, and marine supplies are available. The Southern Pacific Railroad connects Lockport with Valentine and New Orleans.

(95) Several overhead power cables cross the bayou between Lockport and Mathews; minimum clearance is 60 feet. Twin fixed highway bridges with clearances of 42 feet cross the bayou about 1.6 miles above the pontoon highway bridge at Mathews.

(96) At **Mathews,** about 47 miles above the entrance, State Route 364 pontoon highway bridge crosses the bayou. The bridge is operated by cables that are suspended just above the water when the bridge is being opened or closed. The cables are dropped to the bottom when the bridge is in the fully open position, but remain suspended while the bridge is fully closed. Extreme caution is advised in the area of the bridge. **Do not attempt to pass through the bridge until it is fully opened and the cables are dropped to the bottom.** (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.) Several overhead power cables cross Bayou Lafourche between Mathews and Raceland; minimum clearance is 60 feet. Twin fixed highway bridges with clearances of 42 feet cross the bayou about 1.6 miles above the pontoon highway bridge at Mathews.

(97) At **Raceland,** about 51 miles above the entrance, Bayou Lafourche is crossed by two vertical lift bridges about 0.5 mile apart. The more southerly bridge (SR 3199) has a clearance of 59 feet up and 7 feet down, and the northerly bridge (SR 3198) has a clearance of 50 feet up and 7 feet down. (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.)

(98) Several overhead power cables cross the bayou between Raceland and Lafourche; minimum clearance is 60 feet.

(99) At **Lafourche,** State Route 649 highway swing bridge with a clearance of 10 feet and a railroad swing bridge with a clearance of 19 feet cross the bayou about 57.4 and 59.9 miles, respectively, above the mouth. (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.) In July 1993, a replacement State Route 649 highway bridge with a fixed span and design clearances of 18 feet-horizontal and 8 feet-vertical was under construction just above the existing highway bridge. Several overhead power cables cross the bayou between Lafourche and Thibodaux; minimum clearance is 33 feet.

(100) At **Thibodaux,** about 63 miles above the entrance, State Route 20 vertical lift bridge, kept in a closed position and with a clearance of 11 feet, crosses the bayou. (See **117.1 through 117.59 and 117.465**, chapter 2, for drawbridge regulations.)

(101) **Charts 11358, 11357, 11365, 11352.–Southwestern Louisiana Canal** connects Barataria Bay with Timbalier Bay and affords a protected inside passage for small boats. The canal crosses Bayou Lafourche at Leeville, about 11 miles above the bayou mouth. In 1982, it was reported that with a favorable tide about 6 feet could be carried through both Caminada Bay, the E approach, and Little Lake, the W approach. In October 1992, the controlling depth was 2½ feet from Caminada Bay to Leeville, thence in 1982, 6 feet was reported from Leeville to Little Lake, except for shoaling at the W entrance. The E entrance to the canal is marked by a light.

(102) A privately marked channel leads across **Little Lake** to **Bayou Rosa,** thence through **Rosa Bay** to Lake Raccourci. **Deep Bayou** and **Bayou Blue** also connect Little Lake with **Lake Raccourci.** These approaches sometimes are staked, but generally are difficult for a stranger. The main route to the canal from Barataria Bay is through **Bayou Fifi, Bay des Ilettes, Bayou Andre,** or **Bay Joyeux,** and **Caminada Bay.** The channel is marked by lights and daybeacons. Another route is through **East Champagne Bay,** Bay des Ilettes, and **Bay Tambour** via a cut between the last named bays. Because this channel is not marked, strangers should hire fishermen as pilots.

(103) State Route 1 fixed highway bridge crosses the middle of the Southwest Louisiana Canal, making it necessary to enter the canal from Bayou Lafourche through a short cutoff.

(104) **Charts 11357, 11365.–Greys Canal,** 3 miles S of Leeville, with a connecting channel through Bayou Blue, offers the deepest and most used route from Bayou Lafourche to Lake Raccourci and Timbalier Bay. On a favorable tide, about 8 feet can be taken through the channel; the best water is reportedly found in midchannel. Bayou Blue also joins Little Lake.

(105) **Havoline Canal,** 6 miles S of Leeville, is a privately dredged canal that extends from Bayou Lafourche into Timbalier Bay. In July 1982, the canal had a reported controlling depth of 7 feet. The approach channel leading through Timbalier Bay to the canal is marked by lights and private buoys which reportedly should be followed closely. Havoline Canal is open to the public without charge.

(106) **Timbalier Bay** and **Terrebonne Bay** are large shoal-water bays separated from the Gulf by a chain of low sand islands. These waters are accessible from the Gulf through several passes having depths of 4 to 14 feet; however, the depths in Timbalier and Terrebonne Bays range from 4 to 9 feet. There are no settlements of importance in the area, but the bays are frequented by large numbers of fishing and oystering craft which carry their catch through the inside passages to New Orleans and Houma. This area has numerous oil well structures.

(107) **Lake Barre,** N of Terrebonne Bay, has general depths of 4 to 6 feet. **Seabreeze (Lake Barre) Pass** provides a passage marked by a light into Bayou Terrebonne and to **Lake la Graisse** at the NW end of Terrebonne Bay. **Pass Barre** connects with Terrebonne Bay, and several passages at the NE corner of the bay lead to Lake Felicity.

(108) **Old Lady Lake** is a shoal body of water between Lake Raccourci and Lake Barre and S of Lake Felicity. Numerous passages connect with these lakes and with Timbalier Bay. The lake has depths of 3 to 4 feet, but the passes are very shallow and restrict entry to boats drawing 1 or 2 feet.

(109) **Lake Felicity,** with depths of 5 to 6 feet, is N of Old Lady Lake. Many bayous and passes connect with adjacent bays and lakes. Most of the bayous to the E and N of Lake Felicity are used as oyster bedding grounds and, accordingly, contain numerous oyster reefs. The water in the bayous shoals rapidly where the bayous widen, and the channels are difficult to follow without local knowledge. An inside route between Bayou Terrebonne and Bayou Lafourche passes through Lake Felicity; thence through Bayou Jean Lacroix, Cutoff Canal, Grand Bayou Canal, and Canal Blue. The entrance to Lake Felicity is marked by a light.

(110) **Lake Raccourci** is a shoal body of water lying N of Timbalier Bay. The general depths are 4 to 5 feet. The area around **Philo Brice Islands** and **Jacko Camp Bay** contains many oyster beds and fish traps. The oyster beds are marked by iron or brush stakes. Deep Bayou and Bayou Blue lead to Little Lake, and **Grand Pass Felicity** leads to Lake Felicity.

(111) **Dangers.–**There are numerous oil well structures in and about Timbalier and Terrebonne Bays. Privately marked channels lead from Cat Island Pass to Bayou Terrebonne and Bayou Lafourche. Drilling operations are in progress near Caillou Island, **Brush Island,** and East Timbalier Island. Mariners should use the waters in this area only with local knowledge.

(112) **Secondary channels in Timbalier Bay and Terrebonne Bay.–**An unmarked channel leads W across Timbalier and

Terrebonne Bays to Troiscent Piquets Bay and into Bayou Petit Caillou, S to Cat Island Pass, or W into Lake Pelto.

(113) From the E and W channel crossing Terrebonne and Timbalier Bays, a channel extends NE into Lake Raccourci passing through Philo Brice Islands NW of the light and thence continuing E to the entrance to Bayou Blue leading to Bayou Lafourche. On a favorable tide a depth of about 5 feet can be carried into Lake Raccourci and about 4 feet into Bayou Blue.

(114) From inside Cat Island Pass, a channel extends N across the central portion of Terrebonne Bay to **Pass Barre,** which connects with Lake Barre. Depths of 7 feet can be carried into Lake Barre. A group of small low islands exists about 2.5 miles S of Pass Barre with shoaling to 5 feet close W.

(115) The route to Bayou Terrebonne is through the S entrance to Lake la Graisse. The channel through the lake is marked by lights, and a depth of about 3 feet can be carried into the bayou. A second route to Bayou Terrebonne from Lake Barre through Seabreeze Pass is good for 3 feet.

(116) A route leads from Seabreeze Pass across Lake Barre into Lake Felicity, thence to Grand Pass Felicity and across Lake Raccourci to Bayou Blue or Deep Bayou, and thence through either Southwestern Louisiana Canal or Greys Canal to Bayou Lafourche. An unmarked channel leads through Lake Chien, N of Lake Felicity, to Bayou Jean Lacroix. A light marks the E side of the entrance to Lake Chien.

(117) **Timbalier Island** and **East Timbalier Island** are the two largest islands in the chain separating Timbalier and Terrebonne Bays from the Gulf. In recent times the E end of Timbalier Island has been washed away and the W end built up to the W a like amount. East Timbalier Island has built up especially to the W, all but closing Grand Pass Timbalier. Several fish camps are reported on Timbalier Island and East Timbalier Island.

(118) **Grand Pass Timbalier,** at the W end of East Timbalier Island, has been filling up and is little used. The channel is narrow, winding, and difficult to navigate; with local knowledge about 4 feet can be taken through the pass into Timbalier Bay.

(119) The structures of two abandoned lighthouses are off the SW end of East Timbalier Island.

(120) **Little Pass Timbalier,** 2 miles W from Grand Pass Timbalier, is a wider and straighter channel used to enter Timbalier Bay. The pass has a depth of 6 feet on the outer bar and 4 feet on the inner bar. The channel branches at the inner end, the W branch being considered the safer and more generally used. It is reported that this pass is working W.

(121) **Caillou Pass** is a shallow passage between the N side of Timbalier Island and Caillou Island; local knowledge is advised.

(122) **Vessels should enter Terrebonne Bay through Cat Island Pass Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(123) **COLREGS Demarcation Lines.**–The lines established for Cat Island Pass are described in **80.830**, chapter 2.

(124) **Cat Island Pass,** 60 miles W of Southwest Pass, connects the deepest part of Terrebonne Bay with the Gulf and is the principal entrance into Terrebonne Bay. The pass is marked by several lighted and unlighted buoys. In January-July 2002, the controlling depth through the pass was 12 feet. Anchorage area inside the bay has depths of 12 to 16 feet. Farther inside, the depth gradually shoals to the general bay depth of 7 feet or less. The current in Cat Island Pass averages about 1.1 knots on the flood and 1.5 knots on the ebb, however, greater velocities have been reported.

(125) **Charts 11357, 11352, 11355.–Houma Navigation Canal** extends in a NW direction from Cat Island Pass for about 8 miles across Terrebonne Bay, thence in a landcut in a N direction for about 23 miles to an intersection with the Intracoastal Waterway about 1 mile below Houma. The canal is maintained by the Corps of Engineers. In January-July 2002, the controlling depth was 10 feet. The channel is well marked with aids.

(126) Bayou Petit Caillou crosses the canal about 9.8 miles above the entrance, and Bayou Grand Caillou crosses about 17.5 miles above the entrance. No other major waterways cross the canal. A pontoon bridge crosses the canal about 20 miles above the entrance. The bridge is operated by cables that are suspended just above the water when the bridge is being opened or closed. The cables are dropped to the bottom when the bridge is in the fully open position, but remain suspended while the bridge is fully closed. Extreme caution is advised in the area of the bridge. **Do not attempt to pass through the bridge until it is fully opened and the cables are dropped to the bottom.** The bridgetender monitors VHF-FM channel 13. State Route 661 highway bridge crossing the canal about 0.2 mile below the Intracoastal Waterway has a swing span with a clearance of 1 foot. (See **117.1 through 117.59 and 117.455**, chapter 2, for drawbridge regulations.) The bridgetender monitors VHF-FM channel 13; call sign, WDT-573.

(127) There is considerable commerce on the navigation canal in seafood products, shell, lumber and piles, oil well drilling equipment, machinery and supplies, petroleum products, cement, sand and gravel, and chemicals.

(128) **Bayou Pelton** joins the canal about 5.5 miles below Houma and extends SE to Bayou Grand Caillou, described later in this chapter. In December 1982, the controlling depth through Bayou Pelton and Bayou Grand Caillou to Dulac was 5 feet. Overhead power cables crossing Bayou Pelton about 0.2 mile SE of its junction with Houma Navigation Canal have a least clearance of 62 feet.

(129) A highway bridge crossing the bayou about 0.5 mile S of the Intracoastal Waterway has a vertical lift span with clearances of 3 feet down and 73 feet up. (See **117.1 through 117.59 and 117.460**, chapter 2, for drawbridge regulations.) An overhead power cable about 0.3 mile S of the bridge has a clearance of 60 feet. In August 1979, a sunken wreck, marked by a buoy, was reported 2.8 miles S of the bridge at the junction of Bayou la Carpe and Houma Navigation Canal, in about 29°31'24"N., 92°42'25"W. There is considerable commerce on the bayou in petroleum products, shell, clay, shellfish and seafood, oil well pipe, and building cement. The bayou has a large shipyard.

(130) **Houma,** the parish seat of Terrebonne Parish, is at the head of the Navigation Canal, about 32 miles above the entrance. The principal industries are seafood, petroleum, natural gas, sulphur, and sugar and molasses. The area is important in agriculture and cattle raising. The area has numerous offshore oil company supply bases and shipyards. A large shipyard on Bayou la Carpe builds steel vessels and barges to 300 feet. A 4,000-ton floating drydock at the yard can handle vessels to 200 feet long, 92 feet wide, and 16-foot draft. A 1,000-ton marine lift can haul out craft to 310 feet long. Marine railways at the yard can handle craft to 225 feet for hull and engine repairs; a 150-ton crawler crane is available. The city has seafood canneries, a sugar mill, and cold storage facilities.

(131) U.S. Route 90, the main coastal highway, passes through the town, and the Southern Pacific Lines offer railway freight ser-

vice. Southern Pacific Railroad bridge over the Intracoastal Waterway at the junction with Bayou la Carpe has a vertical lift span with clearances of 70 feet up and 4 feet down. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) An overhead power cable with a clearance of 90 feet is close S of the bridge. The Houma airport and an industrial park are SE of the city. Berths, gasoline, diesel fuel, water, ice, and marine supplies of all kinds are available.

(132) **Bayou Terrebonne** is navigable to the town of Houma, 33 miles above its S mouth. For the lower 4 miles of its course, the bayou flows through a long, narrow delta separating Lake Barre and **Lake Jean Pierre** and **Lake Saint Jean Baptiste.** At its S end, Bayou Terrebonne empties into Pass Barre. From each of these are several entrances into the bayou. **Seabreeze (Lake Barre) Pass,** connecting Lake Barre and Lake la Graisse, crosses the N end of the delta and provides the main entrance into the bayou from both Lake Barre and Terrebonne Bay. A dredged channel in the bayou leads from Bush Canal to Houma. In June 1986-July 1992, the controlling depth was 3½ feet from Lake Barre through Seabreeze Pass to the bayou, thence 5½ feet to the junction with Bush Canal; thence in November 1996, 4½ feet to nayou Petit Caillou; thence in 1986, 2 feet to the junction with the Intracoastal Waterway at Houma, thence in 1975, 1 foot for about 0.4 mile to the Barrow Street bridge at Houma.

(133) In June 1986-July 1992, the controlling depth was 3½ feet through Seabreeze Pass and Lake la Graisse to Terrebonne Bay. Between Seabreeze Pass and Pass Barre, **Bayou Jose** and another opening form a connection between Lake Barre and Lake Jean Pierre which can be used by boats drawing up to 2½ feet. In June 1988, a submerged obstruction was reported in Bayou Terrebonne close NW of Light 7.

(134) Lights mark the entrances to the bayou from Lake la Graisse and from Lake Barre.

(135) Bayou Terrebonne has considerable barge traffic in shell, seafood, sugar, petroleum products, building cement, clays and drilling mud, oil well pipe, machinery and supplies, and general cargo.

(136) **Tides.–**The diurnal range of tide is 1.3 feet at the mouth of Bayou Terrebonne. Wind will vary the tide 1 to 3 feet at the mouth, and floods may raise the water level 3 to 4 feet in the upper section.

(137) The banks of Bayou Terrebonne are thickly settled throughout the upper half, in which section mariners may find numerous settlements selling gasoline, oil, and provisions. State highway 55 extends along the E bank of the bayou for 6 miles below Montegut to Lapeyrouse.

(138) Bayou Terrebonne crosses the Intracoastal Waterway at Houma and is joined by Bayou Petit Caillou 3 miles below Houma. At Bourg, 7 miles below Houma, a section of the **Company Canal,** known as **Bourg Canal,** furnishes a cutoff between the bayou and the Intracoastal Waterway. In June 1986, the controlling depth in Bourg Canal was 3 feet. State Route 24 vertical lift bridge with clearances of 50 feet up and 5 feet down crosses Borg Canal just N of the canal's intersection with Bayou Terrebonne. (See **117.1 through 117.59 and 117.438**, chapter 2, for drawbridge regulations.) Overhead power cables cross the canal 0.04 mile and 1.2 miles N of Bayou Terrebonne with clearances of 95 and 98 feet, respectively. Another section of Company Canal extends N from the Intracoastal waterway, to connect with Bayou Lafourche at Lockport. In March 1995, the controlling depth was 4½ feet.

(139) State Route 1 vertical lift highway bridge with clearances of 50 feet up and 5 feet down crosses Company Canal about 0.2 mile SW of the canal's intersection with Bayou Lafourche. (See **117.1 through 117.59 and 117.438**, chapter 2, for drawbridge regulations.) Several other canals enter Bayou Terrebonne and are used by small boats. **Bush Canal,** with a reported controlling depth of 4 feet in June 1982, connects Bayou Terrebonne with Bayou Petit Caillou about 12 miles above the entrance.

(140) Bayou Terrebonne is crossed by several highway bridges with swing and lift spans with ample openings, and by numerous overhead cables with minimum clearance of 57 feet.

(141) **Lapeyrouse,** about 14 miles above the entrance, has a fish wharf with a service wharf at which diesel fuel, gasoline, and ice are available, and a grocery store with a service wharf at which gasoline is available.

(142) **Point Barre,** about 16 miles above the entrance, has facilities for launching outboard motor boats and a commercial fish wharf.

(143) **Montegut,** about 20 miles above the entrance, has a boatyard with marine railways capable of handling craft to 50 feet for general repairs; the yard has a machine shop. Diesel fuel, water, and limited marine supplies are available. A highway bridge at Montegut has a 45-foot vertical lift span with clearances of 3 feet down and 48 feet up. (See **117.1 through 117.49 and 117.505,** chapter 2, for drawbridge regulations.) A road connects Montegut with Bayou Petit Caillou.

(144) A highway bridge crossing the bayou at **Klondyke,** about 1 mile below Bourg, has a vertical lift span with a channel width of 45 feet and clearances of 3½ feet down and 47 feet up. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Gasoline in cans and some groceries can be obtained just above the bridge.

(145) A highway bridge with a 40-foot swing span and a clearance of 5 feet crosses Bayou Terrebonne at **Bourg,** about 25 miles above the entrance and just above the Bourg (Company) Canal. Bourg Canal is crossed at Bourg by a highway vertical lift bridge with clearances of 5 feet down and 50 feet up. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Several overhead power cables cross Bourg Canal in the vicinity of this bridge; least clearance is 80 feet.

(146) Several overhead power cables with a least clearance of 60 feet cross Bayou Terrebonne between Bourg and Presquille.

(147) At **Presquille,** about 27 miles above the entrance to Bayou Terrebonne, State Route 24 highway bridge with a 45-foot fixed span and a clearance of 3 feet. A least clearance of 60 feet is available for the overhead power cables crossing the bayou between Presquille and Houma.

(148) At **Mechanicville,** about 29 miles above the entrance, State Route 3087 highway bridge with a 40-foot vertical lift span and clearances of 3 feet down and 47 feet up crosses Terrebonne Bayou. The highway bridge just E of Houma has a 40-foot swing span and a clearance of 3 feet. (See **117.1 through 117.59 and 117.505**, chapter 2, for drawbridge regulations.)

(149) **Bayou Petit Caillou** empties into **Troiscent Piquents Bay** on the W side of Terrebonne Bay, about 5 miles N of Wine Island Pass. A private light marks the S side of the passage between Terrebonne and Troiscent Piquets Bays.

(150) Bayou Petit Caillou is 29 miles long to its junction with Bayou Terrebonne 4 miles E of Houma. Several canals enter the bayou: Bush Canal leading to Bayou Terrebonne, and Boudreaux Canal and **Robinson Canal** connecting with Bayou Grand

Caillou. Two miles above Cocodrie is a connecting route to Bayou Terrebonne through **Sevin Canal, Bay Negresse,** and Lake la Graisse, good for 3 feet on a favorable tide. About 5 miles above the entrance the bayou crosses the Houma Navigation Canal. In November 1996, the controlling depth in Bayou Petit Caillou was 5½ feet from its junction with Houma Navigational Canal to Boudreaux Canal; thence in June 1986, 1 foot to Bayou Terrebonne.

(151) The lower portion of Bayou Petit Caillou is used considerably by local oystermen and fishermen. The bayou has considerable commerce in petroleum products, and oil well pipe casing, machinery, and supplies.

(152) A highway extends S along the W shore to **Cocodrie,** 6 miles above the mouth of the bayou. There are several oil company bases and fish wharves. Gasoline, diesel fuel, and ice are available. A marina on a bayou about 0.2 mile W of Bayou Petit Caillou, at Cocodrie, has open and covered berths, gasoline, diesel fuel, a paved launching ramp, a 6½-ton fixed lift for handling boats up to 30 feet, ice, water, and marine supplies. The marina is accessible with Bayou Petit Caillou through a channel with a reported controlling depth of 10 feet in July 1982.

(153) **Robinson Canal** enters the bayou from W about 11 miles above the entrance. There is a shipyard on the bayou here, and an oil refinery about 0.5 mile above it. **Bush Canal** enters the bayou from E about 3 miles above Robinson Canal. At **Boudreaux Canal,** 15 miles above the mouth, is a shrimp and oyster cannery.

(154) Several boatyards near **Chauvin** have marine railways that can haul out craft to 60 feet for general repairs; one has a machine shop. Gasoline, diesel fuel, lubricants, water, ice, and marine supplies can be obtained at several places along the bayou.

(155) Six drawbridges cross Bayou Petit Caillou between its mouth and the junction with Bayou Terrebonne. The bridges with swing spans have a minimum width of 40 feet and a minimum clearance of 3 feet, and the limiting clearances at the lift bridges are 3 feet down and 47 feet up. (See **117.1 through 117.59 and 117.475**, chapter 2, for drawbridge regulations.) Overhead power cables crossing the waterway have a minimum clearance of 50 feet.

(156) A channel from Bayou Petit Caillou through Boudreaux Canal, **Lake Boudreaux** and **Bayou Dulac** to Bayou Grand Caillou is marked with lights, buoys, and daybeacons. In 1975, controlling depths were 8 feet in Boudreaux Canal, 5 feet through Lake Boudreaux, and 4 feet through Bayou Dulac.

(157) **Wine Island Pass** is 3.5 miles W of Cat Island Pass, and forms a passage between Wine Island and Isles Dernieres from the Gulf to Lake Pelto and Terrebonne Bay. The pass has depths of 5 to 9 feet over the bar and 7 to 8 feet inside where good anchorage is available. The channel lies close to Isles Dernieres, and, when any sea is running, breakers clearly outline the edges of the channel. The pass is unmarked.

(158) The diurnal range of **tide** at Wine Island Pass is 1.3 feet. The **tidal current** at strength averages 1.7 knots on the flood and 1.9 knots on the ebb. At **Caillou Boca** at the W end of Lake Pelto the diurnal range of tide is 1.4 feet and the tidal current strength averages 1.3 knots on the flood and 0.7 knot on the ebb. The flood flows E and the ebb W.

(159) **Whiskey Pass** forms another passage from the Gulf to Lake Pelto through Isles Dernieres. The depths are 4 to 5 feet at the N end of the unmarked pass. In 1969, a small concrete pyramid marker was reported to mark the W side of the pass.

(160) The main passage from Terrebonne Bay to Lake Pelto, marked by buoys, lies between **Wine Island** and **Point Mast** and has a general depth of 6 to 7 feet. Another passage through Pass la Poule, which is good for a draft of 3 to 4 feet, is marked by private buoys.

(161) **Lake Pelto,** W of Terrebonne Bay and N of **Isles Dernieres,** has general depths of 5 to 7 feet. A protected inside route is afforded small craft drawing 4 to 5 feet from Timbalier and Terrebonne Bays W through Lake Pelto and **Caillou Boca** to Caillou Bay. The channel is marked by lights, buoys, and a daybeacon.

(162) **Charts 11352, 11357, 11356.**–An extensive network of lakes, bayous, and canals extends inland between Terrebonne Bay and Atchafalaya Bay. Though sparsely populated, this area is frequented by local fishermen, trappers, and oil development personnel. The principal entrances from the Gulf are described as follows:

(163) **Caillou Bay,** a large bight with general depths of 5 feet, is N and E of **Raccoon Point** at the W end of Isles Dernieres. An anchorage site with a depth of 7 to 8 feet is close inside Raccoon Point.

(164) **Coupe Colin,** 3 miles E of Raccoon Point, is shallow, changeable, difficult to follow, and is not used even by local fishermen.

(165) **Vessels should approach Bayou Grand Caillou through the Bayou Grand Caillou Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(166) **Bayou Grand Caillou** empties into Caillou Bay 6.5 miles N of Raccoon Point. The entrance is marked by lights. In May 1995, the controlling depth in the bayou was 5 feet from the entrance to **Dulac,** about 20 miles above the mouth. The bayou channels are marked by daybeacons and buoys for about 15 miles above the mouth.

(167) Bayou Grand Caillou crosses Houma Navigation Canal about 2.3 miles below Dulac and is joined by Bayou Dulac at Dulac.

(168) A dredged channel in Bayou Grand Caillou leads from Dulac to Bayou Pelton, thence through Bayou Pelton to Houma Navigation Canal.

(169) State Route 57 extends S along the E bank of Bayou Grand Caillou to below Dulac and connects with State Route 56 along Bayou Petit Caillou about 1.7 miles below Robinson Canal. A vertical lift highway bridge with clearances of 10 feet down and 73 feet up crosses the bayou at Dulac. A vertical lift highway bridge at Boudreaux has clearances of 3 feet down and 73 feet up.

(170) An overhead cable, 3 miles above the highway bridge at Boudreaux, has a clearance of 60 feet. Another overhead cable, 6 miles above the bridge and about 0.3 mile above the crossing with Ashland Canal, has a clearance of 25 feet.

(171) The highway bridge over Bayou Dulac, at Dulac, has a swing span with a clearance of 7 feet. Fixed bridges crossing Bayou Grand Caillou above the highway bridge have a minimum horizontal clearance of 15 feet and a vertical clearance of 1 foot.

(172) Bayou Grand Caillou has considerable commerce in seafood products, shell, petroleum products, clays and drilling mud, oil well pipe casing, machinery, and industrial chemicals.

(173) Dulac has several oil company bases and wharves. A boatyard has marine railways, one of which is capable of handling craft up to 70 feet for hull repairs. On the bayou between

Dulac and Boudreaux are numerous shrimp docks, seafood packing plants, and ice plants. Gasoline, diesel fuel, water, ice, and some marine supplies are available at the docks. A boatyard at **Boudreaux,** about 23 miles above the mouth, has four marine railways that can handle craft up to 50 feet for hull repairs. A machine shop is close by.

(174) **Grand Bayou du Large** extends between **Caillou Lake** and Caillou Bay. Depths of 5 to 6 feet are off the S entrance, and 3 to 4 feet through a buoyed channel across Caillou Lake to **Grand Pass** connecting with **Bayou du Large** and with **Lake Mechant.** In September 1992, a visible wreck was reported in the intersection of Grand Pass and Bayou du Large in about 29°15'54"N., 90°56'10"W. A draft of 3 to 4 feet can be carried up Bayou du Large to **Falgout Canal** and thence into **Lake de Cade.** Lesser drafts can go to **Theriot** and thence to **Lake Theriot** through **Marmande Canal.**

(175) Bayou du Large is not navigable N of the public ramp at Theriot. Several overhead power cables cross the bayou S of Theriot; the clearance is 35 feet. Any of the cables can be removed, upon advance notice of 24 hours, for vessels requiring greater clearance. State Route 315 extends S along the E side of the bayou for several miles below Falgout Canal. This section of the bayou is heavily populated, and at several places gasoline and provisions are available. A boatyard on Bayou du Large, about 5 miles below Falgout Canal, has marine railways that can haul out craft to 65 feet for hull and engine repairs. A marina on the N side of Falgout Canal just W of its junction with Bayou du Large has gasoline, diesel fuel, open and covered berths, ice, launching ramps, and marine supplies.

(176) The highway drawbridges in the Theriot area have a minimum channel width of 27 feet and a minimum clearance of 3 feet. Above Theriot, the bayou narrows and is crossed by fixed bridges with little or no clearance. (See **117.1 through 117.59 and 117.443**, chapter 2, for drawbridge regulations.)

(177) Bayou du Large empties into **Taylors Bayou** which flows into the Gulf 4 miles W of Bayou Grand Caillou entrance. A privately maintained light marks the mouth of Taylors Bayou.

(178) **Oyster Bayou,** 13 miles NW of Raccoon Point, connects the Gulf with Fourleague Bay, an arm of Atchafalaya Bay. This bayou affords a protected route for craft 3 to 3½ feet in draft going to Atchafalaya Bay from Caillou Bay or waters to the E. The bayou has several oyster reefs, which are usually marked by poles.

(179) **Oyster Bayou Light** (29°12'54"N., 91°07'43"W.), 35 feet above the water, is shown from a skeleton tower on piles with a black and white diamond-shaped daymark on the E side of the entrance.

(180) The route across the S end of Fourleague Bay is marked by lights and daybeacons. Boats follow close along the E side of the daybeacons in a channel slightly deeper than the general bay depths. A light off Halters Island Point marks the entrance to Fourleague Bay from Atchafalaya Bay. **Blue Hammock Bayou** on the E side of Fourleague Bay is another entrance to the network of shallow inside waters in this vicinity. Boats drawing 3 to 4 feet can reach the Intracoastal Waterway on a favorable tide by way of **Lost Lake, Bayou de Cade,** Lake de Cade, and **Minors Canal.** Blue Hammock Bayou also connects with Lake Mechant.

(181) **Charts 11357, 11356.–Ship Shoal,** lying about 9 miles S of Raccoon Point, is about 7 miles long in a general E-W direction, about 1.5 miles wide at the W end, and has depths ranging from 9 to 12 feet. Depths of 13 to 30 feet and wrecks with a least depth of 5 feet over them extend about 23.5 miles E of the E end of Ship Shoal. In stormy weather the shoal may be distinguished at some distance off by a choppy or breaking sea. In calm weather its position is not indicated by natural phenomena and can best be avoided by using the lead or fathometer. Heavy rips have been reported about 15 miles SW of Ship Shoal.

(182) Oil drilling structures, marked by lights, are located on all sides of Ship Shoal and up to 60 miles offshore as well as throughout the delta section. Wrecks and other obstructions, covered and unmarked, may exist on the shoal and in the surrounding areas; mariners are advised to exercise extreme caution.

(183) **Ship Shoal Daybeacon** (28°54'48"N., 91°04'18"W.), a brown skeleton structure on piles, formerly the structure of discontinued Ship Shoal Light, is in 14 feet of water on the NW part of Ship Shoal and about 86 miles W of Southwest Pass. The structure is marked by four quick flashing white obstruction lights, displayed at a height of 17 feet above water from the perimeter of the lower platform.

(184) **Currents.–**Current predictions for four passes into Barataria Bay, two passes into Terrebonne Bay and several inside stations may be obtained from the Tidal Current Tables. Weather conditions often modify considerably the tidal currents in these passes.

(185) **Charts 11351, 11354.–Atchafalaya Bay** is a large indentation in the coast of Louisiana 112 miles W of Southwest Pass, Mississippi River. The bay is about 28 miles long in nearly an E-W direction, averages 7 miles in width, is full of shoals and oyster reefs, and has general depths ranging from 3 to 9 feet. A fringe of reefs partially separates the bay from the Gulf, the E end being known as Point au Fer Shell Reef. The bay is the approach to Lower Atchafalaya River and the Port of Morgan City, with depths of 25 feet or less extending 25 miles off the channel entrance. Vessels navigating the bay usually draw 3 to 10 feet.

(186) **Prominent features.–Point au Fer Reef Light** (29°22'18"N., 91°23'06"W.), 44 feet above the water and shown from a square green daymark on a skeleton tower on a concrete platform at **Eugene Island** on the W side of the dredged channel, and an abandoned lighthouse on Southwest Reef are the only conspicuous objects in the **Point au Fer Shell Reef** area. A seasonal fog signal is at the light.

(187) The abandoned lighthouse, 6.5 miles W of Point au Fer Reef Light, is a black, square, pyramidal tower and prominent when approaching close inshore from the W. **Belle Isle,** on the N shore of the bay N of Point au Fer Reef Light, is 75 feet high and conspicuous for some distance offshore. Oil well structures and obstructions are throughout the area.

(188) **COLREGS Demarcation Lines.**–The lines established for Atchafalaya Bay are described in **80.835**, chapter 2.

(189) **Vessels should enter Atchafalaya Bay through the Atchafalaya Pass Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(190) **Channels.–**Atchafalaya Bay Ship Channel extends in a NE direction from the Gulf to near the mouth of the Lower Atchafalaya River. A Federal project provides for a 20-foot dredged channel from the 20-foot contour in the Gulf to about 4 miles SW of the mouth of Lower Atchafalaya River. (See Notice to Mariners and latest editions of the charts for controlling depths.) Depths in the river are about 15 to 17 feet in the entrance, with much deeper water inside to Morgan City.

(191) Lights and buoys mark Atchafalaya Bay ship channel. Point au Fer Reef Light marks the cut through Point au Fer Shell Reef. Strong currents will be encountered in the channel through Point au Fer Shell Reef, especially during N winds and extreme low tides.

(192) A cutoff channel from the mouth of Lower Atchafalaya River W through the bay, to the entrance to East Cote Blanche Bay, has been abandoned. Some of the pile daybeacons marking it have been broken off, are covered at high water, and accordingly constitute a danger to navigation.

(193) **Deer Island,** on the E side of the Lower Atchafalaya River entrance, can be approached through a short dredged channel just SW of the island. The entrance is marked by a daybeacon. The channel has a reported depth of 4 feet.

(194) Fog is most frequent during January, February, and March. S winds bring it in, and N winds clear it away.

(195) **Tides, currents, and freshets.–**The level of the water surface and the velocity of the current depend to a considerable extent upon the force and direction of the wind. At Eugene Island the diurnal range of tide is 1.9 feet. Normal tide action is not perceptible at Morgan City. N winds lower the water surface at Morgan City as much as 1 foot, and SE winds raise it 1.5 to 2 feet.

(196) Freshets occur frequently during May and June, at which times the river overflows its banks and the current has considerable velocity, making it difficult to keep in the channel. During ordinary stages of the river, the current has a velocity of about 0.5 knot. When there are freshets in the rivers, the water in Atchafalaya Bay is quite fresh and that in the Cote Blanche Bays is nearly so. The discolored water coming out of the mouth of the river will be encountered well offshore, the distance depending much upon the direction of the wind.

(197) **Lower Atchafalaya River** flows S into the NE corner of Atchafalaya Bay; it is the outlet for an extensive system of S Louisiana lakes and bayous known as the Atchafalaya navigation system, an inside passage to the Mississippi River about 180 miles above New Orleans.

(198) The Lower Atchafalaya River leads N from Atchafalaya Bay through Berwick Bay, thence W through Berwick Lock, and joins Bayou Teche 8 miles above the Berwick Lock near Patterson. The section of the river from Atchafalaya Bay to Berwick Lock has a crooked channel with depths from 21 to 113 feet over widths from 300 to 600 yards; the deepest water is generally in midstream. In May 1985, the controlling depth in the river from Berwick to Bayou Teche was 2 feet, then in Bayou Teche to the floodgates at the junction with Wax Lake Outlet, 2 feet.

(199) **That part of the Lower Atchafalaya River route from Mile 122 to mile 113 and from Berwick Lock northwest 1 mile into Bayou Teche is within the area of the Berwick Bay Vessel Traffic Service (VTS). (Berwick Bay VTS is discussed later in this chapter.)**

(200) **Bayou Shaffer** is a passage branching NE to Bayou Boeuf from Sweetbay Lake in the Lower Atchafalaya River. An overhead power cable with a clearance of 113 feet crosses Bayou Shaffer near the junction with Bayou Boeuf. The bayou serves as a cutoff for vessels bound E from Atchafalaya Bay to the Intracoastal Waterway. In March 1994, the controlling depth was 5½ feet.

(201) **That part of Bayou Shaffer for 1 mile below the junction with Bayou Boeuf is within the area of the Berwick Bay Vessel Traffic Service (VTS). (Berwick Bay VTS is discussed later in this chapter.)**

(202) **Avoca Island Cutoff** is a narrow channel joining Lower Atchafalaya River with Bayou Chene. The cutoff enters the E side of the river about 4 miles above the mouth. In May 2002, the controlling depth was 8 feet (9 feet at midchannel).

(203) **Bayou Chene** extends from Avoca Island Cutoff to join and become part of the Intracoastal Waterway. In May 2002, the controlling depth was 9 feet (11 feet at midchannel) from the cutoff to the Intracoastal Waterway.

(204) **Little Wax Bayou,** which branches W from the Lower Atchafalaya about 13.5 miles above the mouth, is part of the Intracoastal Waterway and is described later in this chapter.

(205) **Bayou Boeuf,** also part of the Intracoastal Waterway and described in chapter 12, joins the Lower Atchafalaya from E at Morgan City. The Intracoastal Waterway follows Lower Atchafalaya S for 2.5 miles to Little Wax Bayou.

(206) An alternate route of the Intracoastal Waterway, from Morgan City N to Port Allen on the Mississippi River and Bayou Grosse Tete, is described in chapter 12.

(207) **Charts 11355, 11354.–Berwick Bay** is the section of the Lower Atchafalaya from Bayou Boeuf N to Sixmile Lake. Morgan City is on the E side of the bay and Berwick on the W side.

(208) Three bridges across Berwick Bay link Morgan City and Berwick. The Southern Pacific railroad vertical lift bridge has a clearance of 4 feet down and 73 feet up. The bridgetender monitors VHF-FM channel 13; call sign KW-4440. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) U.S. 90 fixed highway bridges, about 400 and 500 yards above the railroad bridge, have clearances of 73 feet and 50 feet, respectively. A lighted approach danger range is shown from the W abutments of the fixed bridges. The range is visible only to downbound vessels and is designed to mark the W boundary of the suggested downbound course for approaching the bridges. **The range is not designed to be steered on. Mariners are cautioned not to rely solely on the range to safely navigate through the bridges.**

(209) In order to advise mariners on southbound vessels that special navigation orders are in effect, Berwick Bay Bridges Warning Lights have been established on the railroad bridge in about 29°41.5'N., 91°12.8'W. The private lights, two quick flashing white lights with orange balls as day signals, are shown from a skeleton tower atop the lift span. The lights operate 24 hours a day when special navigation orders are in effect.

(210) **Vessel Traffic Service, Berwick Bay,** is operated by the U.S. Coast Guard to enhance the safety of navigation in the Berwick Bay area and consists of a communications network, vessel reporting points, and a Vessel Traffic Center (VTC).

(211) When high-water conditions exist in this area, limitations as to the size and makeup of tows, and of certain types of cargo carried, are put into effect.

(212) Based upon information provided by masters of vessels and the bridgetender of the Southern Pacific Railroad Bridge over Berwick Bay, the VTC may make recommendations to coordinate the flow of traffic in the vicinity of and through the bridges across Berwick Bay. While the recommendations of the VTC to coordinate the traffic flow are advisory in nature, compliance with reporting requirements, operating procedures, and high-water vessel and traffic limitations is mandatory for those vessels which must participate in the VTS.

(213) Navigation safety information will be relayed by the VTC. Mutual planning by vessels using the bridge-to-bridge radiotelephone is encouraged. The purpose of the Berwick Bay

Vessel Traffic Service is not to attempt to maneuver or navigate from shore, but to coordinate the flow of traffic through the Vessel Traffic Service area. The rules governing vessels operating in the Vessel Traffic Service area are give in **Part 161**, chapter 2. In addition, the proper operating procedures are contained in the Berwick Bay Vessel Traffic Service Users Manual, available free from Commander, Eight Coast District (oan), Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, or from the Commanding Officer, Coast Guard Marine Safety Office (vts), 800 David Drive, Morgan City, LA 70380-1304.

(214) **Port of Morgan City** is at the confluence of Atchafalaya River and the Intracoastal Waterway about 35 miles from deep water in the Gulf of Mexico. The port limits include the E quarter of the Parish of St. Marys from 91°17.4'W. to Bayous Boeuf and Chene, and from Sixmile Lake to the mouth of Atchafalaya River. Numerous inland waterways that radiate from the port make it a center for offshore oil exploration and development. There is considerable commerce in seafood, shell, petroleum products, building cement, sand and gravel, oil-well pipe casing, machinery, and supplies, and chemicals. The Port of Morgan City Harbor and Terminal District has jurisdiction over the port under a Board of Commissioners appointed by the governor of the State. The board establishes rules and regulations for the port.

(215) **Morgan City,** on the E side of Berwick Bay, has several landings with ample depths for river boats; vessels generally go alongside, because of the depths and currents in the river. The principal industries are fishing, ship building, cement, petroleum, carbon black, chemicals, sulfur, salt, menhaden, and some agriculture in the raising of rice and sugar. The city has ice and cold storage plants. Tugs up to 4,500 hp operate from Morgan City.

(216) The Young Memorial Vocational Training Center, a school for navigation, seamanship, and marine and electrical engineering, is located in Morgan City.

(217) **Quarantine, customs, immigration, and agricultural quarantine.**–(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(218) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(219) There is a hospital at Morgan City.

(220) Morgan City is a **customs port of entry.**

(221) A 1,300-foot-long public wharf with 12 feet reported alongside is on the E side of Berwick Bay between the railroad lift bridge and the U.S. 90 highway bridge. The wharf has water and electrical shore-power connections.

(222) **Repairs.**–Several shipbuilding and repair yards are at Morgan City and on Bayou Boeuf. There are also yards on Bayou Black at West Gibson and on Bayou Teche at Avalon. These yards have floating drydocks, marine railways, and machine and other repair shops, and build barges, tugs, crew boats, oil well structures, and shrimp boats. The largest floating drydock, at one of the yards on Bayou Boeuf, has a 6,200-ton lifting capacity and can handle vessels to 250 feet long, 110-foot beam, and 20-foot draft for complete repairs; a 750-ton floating crane is also available at this yard. The smaller yards build and repair tugs, shrimp boats, and other fishing craft. A 500-ton floating crane and many smaller cranes are available at these yards. Gasoline, diesel fuel, water, ice, and marine supplies are available.

(223) There are no marinas at Morgan City, and dockage is limited to the fueling piers, and fishing company and oil company piers.

(224) **Berwick,** opposite Morgan City on the W side of Berwick Bay, has several seafood, fertilizer, and chemical plants, a shipyard, and several oil company bases. The shipyard has several floating drydocks, the largest of which can handle vessels to 2,000 tons, 200 feet long, 79-foot beam, and 16-foot draft for general repairs; a 25-ton crane is available. Gasoline, diesel fuel, water, ice, and marine supplies are available.

(225) **Communications.**–The port is served by the Southern Pacific Railroad which has connections with other trunk railroads. U.S. Route 90 passes through the city. A State-owned airport is 14 miles W of the city at Patterson. Numerous truck lines operate out of the port.

(226) **Charts 11355, 11354, 11350, 11352, 11345.–Bayou Teche** is a navigable waterway in S Louisiana parallel to and 35 miles W of the Mississippi River, meandering NW for about 93 miles from its junction with Lower Atchafalaya River, about 8 miles W of **Berwick Lock,** to its sources in St. Landrys Parish. The lock has a length of 300 feet, width of 45 feet, and depth over the sill of 9 feet at mean low water. The lockmaster monitors VHF-FM channel 13. The lock operates from 0600 to 2200 daily.

(227) There is considerable commerce on Bayou Teche, and that part of Lower Atchafalaya River W of Berwick Lock, in seafood, shell, sugar, molasses, petroleum products, building cement, sand and gravel, oil-well pipe casing, machinery and supplies, fertilizer, and chemicals. There are shipyards and sugar mills along the bayou. Shell barges are the principal users; shrimp boats operate to Patterson.

(228) The main State highway between New Orleans and Lake Charles follows the bayou through the principal towns.

(229) A dredged channel leads from Berwick Lock W through the Lower Atchafalaya River and Bayou Teche to Arnaudville, a distance of about 100 miles. In April-May 1995, the controlling depths were 3½ feet to the flood-gates at the junction with Wax Lake Outlet, thence 2 feet to the first highway bridge at Franklin, thence shoaling to bare to the Charenton Drainage and Navigation Canal, thence 7 feet to the bridge at Jeanerette, thence 5½ feet to New Iberia, thence 4½ feet to Keystone Lock and Dam, thence 5½ feet to Breaux Bridge; thence, in 1993, 6 feet to Arnaudville.

(230) The St. Mary Parish highway bridge about 7 miles above Berwick Lock at **Patterson** has a swing span with a clearance of 6 feet. (See **117.1 through 117.59 and 117.477**, chapter 2, for drawbridge regulations.) An overhead power cable at the bridge has a clearance of 55 feet. An overhead power cable crossing the bayou about 8.5 miles above Berwick Lock has a clearance of 66 feet.

(231) A highway swing bridge with a clearance of 5 feet is at **Avalon** about 10.6 miles above the lock. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(232) A shipyard at Avalon has a 125-foot marine railway and a 250-ton drydock that can handle vessels to 125 feet long, 30-foot beam, and 8-foot draft. Hull repairs can be made to steel and aluminum vessels.

(233) Bayou Teche crosses the Wax Lake Outlet channel at **Calumet,** about 12 miles above Berwick Lock. There are floodgates, which are usually open, across both sides of Bayou Teche at its junction with Wax Lake Outlet. During high-water stages, the E

gate remains closed. The W gate is manned from 0500 to 1900 and is opened upon request. The floodgates are used by small craft only. The opened widths through the floodgates are 45 feet. The overhead power cable just E of the E floodgate has a clearance of 60 feet. Local information should be obtained before attempting the alternate route through Sixmile Lake.

(234) At **Centerville,** about 17 miles above the lock, an overhead power cable with a clearance of 60 feet crosses the bayou. A highway swing bridge with a clearance of 5 feet crosses the bayou about 0.5 mile W of Centerville. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(235) **Garden City,** 18.5 miles above Berwick Lock, is the site of a large lumber mill. An overhead power cable about 20 miles above the lock has a clearance of 66 feet.

(236) **Hanson Canal** is 20.2 miles above Berwick Lock; little used for navigation, it leads S from Bayou Teche at Garden City, turns W, and enters and follows Bayou Portage to the Intracoastal Waterway in Bayou Bartholomew. In July 1982, it was reported that the canal was used only by small outboard boats and local knowledge was recommended. Near the junction of Hanson Canal and Bayou Teche are the remains of an abandoned lock; seven fixed bridges with minimum widths of 18 feet and clearances of 6 feet; overhead pipelines with clearances of 7 feet, and overhead power cables with clearances of 35 feet. Traffic between the Intracoastal Waterway and Bayou Teche is via the Charenton Canal discussed later in this chapter and in chapter 12.

(237) **Franklin,** about 22 miles above Berwick Lock, is an agricultural center that has several industries, and is the seat of St. Mary Parish. **Franklin Canal,** SW of Franklin, leads into **Bayou Portage** and connects with the Intracoastal Waterway at Bayou Bartholomew. In April 1997, the controlling depth through Franklin Canal and Bayou Portage to Bayou Bartholomew was 4 feet. Near its N end, the canal is crossed by three overhead power cables with a least clearance of 60 feet, twin fixed highway bridges with a clearance of 50 feet, and a highway swing bridge with a clearance of 7 feet. (See 117.1 through **117.59 and 117.445**, chapter 2, for drawbridge regulations.) In March 1993, a visible wreck was reported 0.2 mile above the swing bridge in about 29°47'11.5"N., 91°31'11.0"W.

(238) An overhead power cable with a clearance of 60 feet crosses Bayou Teche just below Franklin.

(239) At the town of Franklin a highway bridge with a swing span has a clearance of 2 feet. An overhead power cable about 0.1 mile N of the bridge has a clearance of 60 feet. Another highway bridge with a swing span with a clearance of 4 feet is about 23 miles above Berwick Lock. An overhead television cable about 0.1 mile W of the highway bridge has a clearance of 60 feet. The railroad bridge that crosses the bayou 26.5 miles above the lock, with a width of 49 feet, was not being used in 1982, and its span was left in an open position. A highway bridge with a swing span having a clearance of 6 feet crosses the bayou 27 miles above the lock. Several more bridges with swing spans cross the bayou between 31.1 and 48.1 miles above the lock; minimum clearance is 3 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.) Between Franklin and Jeanerette several overhead power cables cross the bayou; least clearance is 60 feet.

(240) Launching ramps are available at Franklin on the W side of Bayou Teche and near the head of Franklin Canal.

(241) **Jeanerette** is 44 miles above Berwick Lock and is chiefly a market town; its principal products are sugar, oil, pecans, and peppers. There is a large foundry in the town.

(242) About 1 mile NW of **Hope,** 46.5 miles above Berwick Lock, a highway swing bridge with a clearance of 5 feet crosses Bayou Teche. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(243) The highway bridge which crosses the bayou at **Olivier,** about 50 miles above Berwick Lock, has a swing span with a clearance of 4 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(244) A highway swing bridge with a clearance of 5 feet crosses the bayou about 1.5 miles above Olivier. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(245) Between Jeanerette and New Iberia are several overhead power cables that cross the bayou; least clearance is 60 feet.

(246) **New Iberia,** the seat of Iberia Parish, lies on the banks of Bayou Teche, 54 miles above Berwick Lock. The town is the center of an extensive agricultural area and has food processing plants, dairies, condiment factories, and several small manufacturing industries, and is a supply center for the oil development of the surrounding area. New Iberia has two hospitals.

(247) Several highway bridges with swing spans and one with a bascule span cross the bayou at New Iberia; least clearance is 4 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(248) The **Port of Iberia (Port of New Iberia)** is located 5 miles S of New Iberia, on **Commercial Canal,** which connects with the Intracoastal Waterway through **Acadiana Navigational Channel** and Bayou Carlin. From the Intracoastal Waterway, a channel leads SW and across the bar into Weeks Bay at the NE corner to Vermilion Bay. In August 2000, the reported depth was 6 feet across the bar to the Intracoastal Waterway; thence in March 2002, 12 feet to the head of the canal at the Port of Iberia.

(249) The port is 7 miles N of the Intracoastal Waterway, about 8.5 miles from Weeks Bay, and about 35 miles from deep water in the Gulf. The port has several slips and a small turning basin, all of which are reported to have a controlling depth of 14 feet in July 1982. The principal industries located in the port area are sugar, chemicals, fertilizer, shell, grain, oil-well rig and machinery construction and repair, pipe coating, and shipbuilding. Loading and docking facilities are available at the public dock. Gasoline, diesel fuel, water, and ice are available. A shipyard in the port has two floating drydocks, the largest of which has a 3,300-ton lifting capacity and can handle vessels to 180 feet long, 79-foot beam, and 16-foot draft for complete repairs.

(250) The canal and port are governed by the Board of Directors of the Port Commission, Port of Iberia; telephone 337-364-1065; website address: www.portofiberia.com.

(251) There are highway and railroad connections to the port area.

(252) Several highway bridges with swing spans cross Bayou Teche between New Iberia and Loreauville; minimum channel width 50 feet and minimum clearance 3 feet. The highway bridge at Loreauville 61.9 miles above Berwick Lock has a vertical-lift span with a clearance of 3 feet down and 50 feet up. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.) Overhead power cables crossing the bayou between New Iberia and Loreauville have a least clearance of 60 feet.

(253) A shipbuilding plant on the W bank above **Loreauville,** about 8 miles above New Iberia, constructs aluminum boats to

135 feet long. In an emergency, they can handle boats to 80 feet long and with 7-foot draft for complete repairs. Marine supplies can be obtained at the yard.

(254) A highway bridge about 4.5 miles above Loreauville has a swing span with a clearance of 8 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.) An overhead power cable crosses the bayou between Loreauville and Keystone Lock; clearance is 60 feet.

(255) **Keystone Lock,** 160 feet long and 36 feet wide with a depth of 9 feet over the sill, is 17 miles above New Iberia and 70.7 miles above Berwick Lock, and halfway, by highway, between New Iberia and St. Martinville. Traffic lights are at each end of the lock. Vessels should wait for the green light before entering the lock.

(256) The least clearance of overhead power cables between Keystone Lock and Ruth is 50 feet.

(257) A highway swing bridge with a clearance of 6½ feet is about 71.5 miles above Berwick Lock. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(258) **St. Martinville** is a town on Bayou Teche about 20 miles above New Iberia, of interest because of the early French settlers and Evangeline, the heroine of Longfellow's famous poem. An overhead power cable crossing the bayou at St. Martinville has a clearance of 67 feet. A highway bridge over the bayou 73.1 miles above Berwick Lock has a swing span with a width of 40 feet and a clearance of 4 feet. A combination railroad-and-highway bridge at **Levert,** 75.2 miles above the lock, has a swing span with a clearance of 8 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(259) A highway bridge at **Parks,** 78.8 miles above Berwick Lock, has a vertical lift span with a width of 41 feet and a clearance of 5 feet down and 50 feet up. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.)

(260) A highway bridge crossing the bayou at **Ruth,** 83.6 miles above Berwick Lock, has a fixed span with a clearance of 6 feet.

(261) Several bridges and overhead power cables cross the bayou between Ruth and Arnaudville. Least clearances are: swing spans, 15 feet; vertical-lift spans, 1 foot down, 51 feet up; removable spans, 5 feet; fixed spans, 7 feet. (See **117.1 through 117.59 and 117.501**, chapter 2, for drawbridge regulations.) Overhead power cables between Ruth and Arnaudville have a least known clearance of 40 feet.

(262) The Lower Atchafalaya River leads N from Berwick Bay through Stouts Pass to Sixmile Lake. The marked channel N through **Sixmile Lake** and **Grand Lake** is part of the Atchafalaya River navigation system discussed in chapter 12.

(263) **Wax Lake Outlet,** a drainage canal for the Atchafalaya Floodway, is not a maintained waterway, however, it has some light barge traffic. This outlet leads SSW from Sixmile Lake to Atchafalaya Bay, crosses Bayou Teche near Calumet, the Intracoastal Waterway in the vicinity of Possum Point Bayou, thence through Wax Lake into the bay. An overhead pipeline bridge with a clearance of 33 feet crosses the canal 0.8 mile N of Bayou Teche. Three bridges with fixed channel spans and a minimum clearance of 2 feet control navigation in the canal S of Bayou Teche. An overhead power cable about 150 yards S of the bridges has a clearance of 60 feet. Overhead pipeline bridges 0.3 to 0.4 mile S of the bridges have a least clearance of 73 feet. An overhead telephone cable just N of the bridges has a clearance of 18 feet. In 1969 the entrance to Wax Lake Outlet from Sixmile Lake was reported to be marked by private buoys; also reported was an old sugar mill and stack on the E side of the entrance. Strong currents are reported to exist in Wax Lake Outlet.

(264) **Chart 11351.–Little Wax Bayou,** branching W from Lower Atchafalaya River 2.5 miles below Morgan City, empties into **Wax Lake** and through **Wax Lake Pass** and **New Pass** into Atchafalaya Bay. The N end of the bayou has been straightened by dredged cuts to form the route of the Intracoastal Waterway W from Lower Atchafalaya River. **Big Wax Bayou** flows into Wax Lake Pass and through New Pass into Atchafalaya Bay. These bayous form an inside route from Morgan City to the W part of the bay. In 1969, shoaling to 2 feet, and numerous uncharted stumps, snags, and logs were reported in the approach to New Pass from Atchafalaya Bay extending about 4 miles S from a point in about 29°13.8'N., 91°26.5'W.

(265) **Charts 11350, 11345, 11351, 11349.–Marsh Island,** on the S side of Vermilion Bay and W of Atchafalaya Bay, is low and marshy. The entire Gulf shore of the island is foul; numerous oyster reefs, some of which uncover at low water, extend for about 4.5 miles off the S point of the island. The foul area should not be entered without local knowledge. **Shell Keys,** a low group of small islands 3 miles SSW of **Mound Point,** the southernmost point of Marsh Island, are only about 2 feet high.

(266) **Trinity Shoal** lies about 25 miles S of Southwest Pass, Vermilion Bay, and 60 miles 285° from Ship Shoal Daybeacon. The shoal is about 20 miles long in a WSW and ENE direction, and has depths of 11 to 18 feet. It is fairly steep-to on its S side, the 5- and 10-fathom curves being distant only about 1 and 5 miles, respectively. In calm weather Trinity Shoal is discernible by a difference in the color of the water, and in stormy weather by a choppy sea. Because of its greater depth, the sea does not break as heavily on Trinity Shoal as it does on Ship Shoal.

(267) **Vessels should approach Southwest Pass through the prescribed Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(268) Sunken wrecks have been reported in the safety fairway in about 29°32'N., 92°05'W. and in about 29°28.5'N., 92°06.7'W. Caution is advised in these areas.

(269) **COLREGS Demarcation Lines.**–The lines established for Southwest Pass are described in **80.835**, chapter 2.

(270) **Southwest Pass** extends between the W end of Marsh Island and the mainland and is the entrance to Vermilion Bay from the Gulf. The pass is marked by lights and daybeacons, and the approach channel across the bar is marked by lights. In September 1994, the controlling depth across the bar and through the pass was 6½ feet. Although not difficult to enter, the pass may be difficult to recognize and local assistance is advised.

(271) **East Cote Blanche Bay, West Cote Blanche Bay,** and **Vermilion Bay** together make up a large body of water extending WNW from the NW side of Atchafalaya Bay, and are separated from the Gulf by Marsh Island. This water area is about 32 miles long and 5 to 15 miles wide, and depths averaging of 5 to 9 feet. With the exception of Cote Blanche Island, Weeks Island, and Avery Island, the shores of these bays and Marsh Island are low and marshy. In recent years there has been extensive oil exploration in the bays offshore from **Burns** off **South Bend** in East Cote Blanche Bay, along the NW shore in West Cote Blanche Bay, and on Dry Reef.

(272) Boats bound from Atchafalaya Bay to East Cote Blanche Bay generally use **Morrison Cutoff,** which is between **Point**

Chevreuil on the E and **Rabbit Island** on the W. Under favorable conditions a draft of 4 to 5 feet can be carried through the cutoff into East Cote Blanche Bay and thence through West Cote Blanche Bay to Vermilion Bay. Local knowledge is needed to carry the best water.

(273) **The Jaws**, at the NE corner of West Cote Blanche Bay is a passage connecting the bay with the Intracoastal Waterway and with **Charenton Drainage and Navigation Canal**. In April 1997, the controlling depth was 4 feet through the passage; knowledge of local existing conditions is advised. A passage through the bay from off **Point Marone** through The Jaws is marked by private daybeacons and a light.

(274) **Cote Blanche Island,** 97 feet high, is on the N side of West Cote Blanche Bay. From the bay side, the island appears as a reddish-yellow steep bluff. **Ivanhoe Canal,** W of the island, connects West Cote Blanche Bay with the Intracoastal Waterway. In 1983, the canal had a reported controlling depth of 4½ feet. The canal is marked by private aids.

(275) A seaplane dock, marked by a private light, is about 3.8 miles SW of the entrance to Ivanhoe Canal in about 29°42'16"N., 91°47'27"W.

(276) **Cypremort Point,** on the E side of Vermilion Bay and NW side of West Cote Blanche Bay, is the site of a summer resort. Several private canals, on which are homes and private docks, have been dredged into the banks on the N side of the point. Gasoline, diesel fuel, ice, and a launching ramp are available at a fuel facility on the point. The canals and the channel leading to the fuel facility had reported controlling depths of about 3 feet in July 1982. Private mooring slips are available. State Route 319 connects the point with the town of **Cypremort.**

(277) **Weeks Island,** 171 feet high, is E of **Weeks Bay,** the NE extension of Vermilion Bay. The Intracoastal Waterway passes close along the W side of the island. Several storage tanks and the mine buildings make prominent landmarks from the bays; salt is mined on the island. There are rail and highway connections to **Balwin** on Bayou Teche. A large oil field is on the N side of Weeks Island.

(278) **Avery Canal** leads NW from Vermilion Bay to a junction with Bayou Petite Anse at the Intracoastal Waterway. A dredged approach channel leads from Vermilion Bay to the canal. In August 2000, the reported controlling depths were 6.9 feet in the entrance and 14.1 feet in Avery Canal. Lights mark the entrance channel.

(279) A dredged channel in **Bayou Petite Anse** leads from the Intracoastal Waterway N for about 5.3 miles to a fixed highway bridge at the N end of Avery Island. In April 1997, the controlling depth was 11 feet to the junction with Bayou Carlin, thence 4 feet to the highway bridge. Daybeacons mark the channel.

(280) **Avery Island,** E of Bayou Petite Anse, has several mine buildings that show prominently from Vermilion Bay. A canal 9 feet deep leads from Bayou Petite Anse to a salt mine on the island. A railroad and a highway from New Iberia extend as far S as Avery Island.

(281) About 2.8 miles above the Intracoastal Waterway, the Acadiana Navigational Channel in **Bayou Carlin** branches NW from Bayou Petite Anse for about 2.5 miles to a junction with Bayou Tigre and Delcambre Canal. The dredged channel in **Delcambre Canal** continues N to **Lake Peigneur.** In April 1997, the controlling depth was 7½ feet in Bayou Carlin and Delcambre Canal.

(282) **Delcambre** is on Delcambre Canal, 2 miles S of Lake Peigneur, and is the fishing center for Iberia Parish. The town has several seafood processing plants, public wharves, and a shipyard with a marine railway capable of handling vessels to 65 feet. General hull and electronic repairs can be made. There is a marina where covered berthage can be obtained. Numerous shrimp boats base at the port. Gasoline, diesel fuel, water, ice, and marine supplies are available. Highway and railroad bridges with vertical lift spans cross the canal at Delcambre. Each bridge has a channel width of 40 feet; the Southern Pacific railroad bridge has a clearance of zero feet down and 46 feet up, and State Route 14 highway bridge has a clearance of 2 feet down and 44 feet up. (See **117.1 through 117.59 and 117.436**, chapter 2, for drawbridge regulations.) In July 1999, a bascule bridge was under construction with a design clearance of 4 feet down and 73 feet up; upon completion, it will replace the State Route 14 highway bridge. An overhead power cable at the highway bridge has a clearance of 51 feet.

(283) **Jefferson Island,** on Lake Peigneur, is the site of a large salt mine. It is the head of navigation on the canal. The lake is cluttered with old piling and other obstructions.

(284) **Bayou Tigre,** navigated only by small craft at high tide, is a tortuous waterway extending from Bayou Carlin to **Erath.** Seven bridges cross the bayou; minimum width is 9 feet, and minimum clearance of fixed spans is 1 foot. (See **117.1 through 117.59 and 117.507**, chapter 2, for drawbridge regulations.) A shipyard at Erath has a marine lift that can haul out craft to 60 feet for hull repairs.

(285) A private light and daybeacons in Vermilion Bay mark the entrance channel into **Boston Bayou,** about 7.3 miles SW of Avery Canal. In June 1986, the reported controlling depths were 3½ feet in the entrance channel, thence in 1980, 4 feet to the Intracoastal Waterway.

(286) **Vermilion River,** also known as **Bayou Vermilion** and so marked at the bridge crossings, flows from the N and crosses the Intracoastal Waterway and enters Vermilion Bay through **Four Mile Cutoff (Vermilion River Cutoff).**

(287) A dredged channel leads from Vermilion Bay through Four Mile Cutoff, across the Intracoastal Waterway, and N in the Vermilion River to Lafayette. In April 1997, the controlling depths were 7 feet across the bar in Vermilion Bay, thence 9 feet through Four Mile Cutoff; thence in March 1997, 9 feet to Woodlawn Bridge, thence 7½ feet to Broussard Highway Bridge, thence 4½ feet to Ambassador Caffery Bridge; thence in February 1995, the river was bare for about 2 miles below Lafayette to the Pinhook Highway Bridge. Lights mark the entrance channel. A channel, marked by lights, leads across Vermilion Bay from Southwest Pass to the entrance channel to Four Mile Cutoff. The entrance shoals rapidly after dredging and may be difficult to enter during the winter when strong winds from the N lower the water in the bay. In February 1983, it was reported that the river channel is subject to shoaling at its junction with a small stream about 0.8 mile below the Pinhook Highway Bridge. Mariners are advised that strong currents may be encountered in the river. In July 1982, several sunken barges were reported to be along the E bank of the river about 1 mile N of the junction with the Intracoastal Waterway. Caution is advised while navigating in the area.

(288) The limiting clearances of the numerous overhead power cables crossing the river are as follows: Intracoastal Waterway to Perry, 65 feet (at Rose Hill); Perry to Abbeville, 60 feet (just SW

of Abbeville); and Abbeville to Lafayette, 54 feet (at Milton). The least clearance of the three swing bridges across the river is 3 feet; of the six vertical lift bridges, 4 feet down and 50 feet up; and of the two fixed bridges, on railroad and one highway, at Lafayette, 5½ feet vertical and 25 feet horizontal. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.)

(289) Waterborne commerce on the Vermilion River is in petroleum products, shell, oil-well pipe casing, machinery, cement, sand and gravel, and crushed rock.

(290) **Intracoastal City,** on the Vermilion River just N of the Intracoastal Waterway, has several offshore oil-well terminals and bases, a fish packing plant and wharf, boat club, and several marinas and boatyards. The largest marine railway in the area can handle craft up to 50 feet for hull and engine repairs; lifts are also available. Floating cranes up to 250 tons, lifts, and marine railways are available for hauling out barges for repairs at the oil company bases. Gasoline, diesel fuel, water, ice, marine supplies, a surfaced launching ramp, and open and covered berthage are available. Depths of 4 to 14 feet were reported alongside the berths in July 1982.

(291) **Cable ferry.**–A cable ferry crosses Vermilion River at **Bancker,** a small village about halfway between the Intracoastal Waterway and Abbeville. Unlighted white signs, labeled "Caution Cable Ferry", mark the E and W approaches about 500 to 1,000 feet on either side of the ferry crossing. The ferry is equipped with navigational lights and operates between the hours of 0500 and 2100 daily. When the ferry is underway, the unmarked cables extend about 1 to 2 feet above the water's surface, and are dropped to the bottom when not underway. **DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.**

(292) A shipyard that builds and repairs tugs, party boats, and barges is on the E side of the river at Bancker. The largest floating drydock at the yard has a capacity of 2,000 tons and can handle vessels to 200 feet long with 90-foot beam and 14-foot draft. Machine and welding shops, supplies, and a 60-ton crane are available; fuel is available by truck.

(293) The **Port of Vermilion,** on the W side of the river just above Bancker, is the site of oilfield equipment fabrication companies. In 1982, the reported controlling depth in the port was 16 feet. A public dock at the port can provide gasoline and water.

(294) **Perry** is a small village about 16 miles above the Intracoastal Waterway. State Route 82 highway verticle lift bridge at Perry has a clearance of 10 feet down and 55 feet up. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.) A shipyard on the W side just below the bridge has marine ways capable of handling crew boats up to 65 feet long and 7 feet in draft for general repairs. Gasoline and diesel fuel can be trucked in. There are metal, joiner, and welding shops at the yard and hull and engine repairs can be made.

(295) A service wharf for tugs and crew boats is on the W side of the Vermilion River about 18 miles above the Intracoastal Waterway. Gasoline, diesel fuel, water, and some marine supplies are available. A shipyard on the W side of the river at Abbeville, about 18.5 miles above the Intracoastal Waterway, builds and hauls out for repairs wooden and steel crew boats to 75 feet and steel barges to 120 feet long and 5 feet in draft. A 30-ton crane is available. Just above the yard, the Southern Pacific Railroad swing bridge with a clearance of 8 feet crosses the river. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(296) **Abbeville,** about 19 miles above the Intracoastal Waterway, is the seat of Vermilion Parish. There are grain elevators, grain driers, warehouses, and a rice mill. The principal industries are oil and natural gas production, shell and cement, rice, cotton, wool, sugar, molasses, and syrup, dairy products, poultry, and cattle raising, and light industry in manufacture of consumer goods. The city has a hospital and a municipal airport, and is served by freight service of the Southern Pacific Railroad and bus lines. State Route 14 and State Route 14 Bypass highway bridges crossing the river at Abbeville have lift spans with minimum clearances of 6 feet down and 55 feet up. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.) An overhead television cable just below State Route 14 highway bridge has a clearance of 60 feet. U.S. Route 167 and State Routes 14 and 82 pass through the city.

(297) Woodlawn Highway Bridge crossing the river about 27 miles above the Intracoastal Waterway has a swing span with a clearance of 13 feet. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.) An overhead power cable with a clearance of 77 feet crosses the river about 0.3 mile below the bridge. Gasoline is available at a dock near the bridge. State Route 92 highway bridge at **Milton** about 29.7 miles above the waterway has a vertical lift span with clearances of 4 feet down and 50 feet up. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.) Overhead power and television cables just below the bridge have a least clearance of 28 feet.

(298) Broussard Bridge (SR 733) about 32.2 miles above the waterway has a vertical lift span with clearances of 6 feet down and 52 feet up. New Flanders (SR 3073) highway bridge about 36 miles above the waterway has a swing span with a clearance of 13 feet. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.)

(299) Pinhook Highway Bridge (State Route 182) at Lafayette and about 39.5 miles above the Intracoastal Waterway has a 40-foot vertical lift span with clearances of 10 feet down and 50 feet up. (See **117.1 through 117.59 and 117.509**, chapter 2, for drawbridge regulations.) In February 1983, it was reported that during periods of high water, primarily during winter and spring, severe turbulence may be experienced at the bridge.

(300) **Lafayette,** about 42 miles above the Intracoastal Waterway, is the seat of Lafayette Parish. Lafayette is referred to as the administrative oil capital of the world and is the headquarters of over 600 major and associated oil companies. It is the historical and cultural center of the Acadian country and Cajun people. The University of Southwestern Louisiana is in the city. The principal industries are oil, natural gas, and salt production, but the area is primarily agricultural with production of rice, cotton, soybeans, sugar, molasses, dairy products, livestock, wool, and poultry. Shell is manufactured into cement, and sand, gravel, and timber are important products. There are four large hospitals, two medical centers, and a municipal auditorium in the city. The city is served by passenger and freight service of Amtrak and the Southern Pacific Railroad, bus lines, and airlines. The Lafayette Municipal Airport is on the E side of the city. State Route 729 highway bridge at Lafayette has a 25-foot fixed span with a clearance of 5½ feet. Southern Pacific fixed railroad bridge, about 200 yards above the highway bridge, has a clearance of 21 feet. The bridges are the head of navigation for all but small shallow-draft vessels. In February 1983, it was reported that during periods of high water, primarily winter and spring, severe turbulence may be encountered at the railroad bridge. A small-craft facility is on

the E side of the river just above the railroad bridge, and a launching ramp is about 0.5 mile above the bridge. Fuel and supplies can be trucked to several locations in the city.

(301) **Charts 11345, 11349, 11350, 11348.–Freshwater Bayou Channel**, a dredged channel, leads from the Gulf to the entrance of **Freshwater Bayou Canal**. Freshwater Bayou Canal continues N to the Intracoastal Waterway about 1 mile W of Intracoastal City. In May 2002, the controlling depth in the entrance channel was 9 feet to the canal, thence 5 feet in the canal to Light 14, thence 7 feet to Schooner Bayou Canal, thence 10 feet to the canal junction with the Intracoastal Waterway. A lighted bell buoy marks the approach, and lights and buoys mark the approach channel to the entrance of the canal. Lights mark the canal to its junction with the Intracoastal Waterway. A saltwater barrier lock is about 1.3 miles above the entrance. The lock is 600 feet long and 84 feet wide, and has depths of 16 feet over the sills. Each end of the lock on the W side of the channel has 300-foot-long timber guidewall approaches. The lock is in operation continuously.

(302) **Vessels should approach Freshwater Bayou from the Gulf through Freshwater Bayou Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(303) **COLREGS Demarcation Lines.**–The lines established for Freshwater Bayou are described in **80.835**, chapter 2.

(304) **Schooner Bayou** empties into the extreme W extension of Vermilion Bay and forms a part of the former inside route of Mermentau River through White and Grand Lakes and connecting passages. The best approach to Schooner Bayou is through Freshwater Bayou Canal, the dredged canal which takes off from the Intracoastal Waterway near Intracoastal City. In September 2000, the controlling depth was 10 feet in Freshwater Bayou Canal from the Intracoastal Waterway to Schooner Bayou, thence in March 1996, 5½ feet in Schooner Bayou to Schooner Bayou Control Structure. Isle Marrone Canal and North Prong-Schooner Bayou connect Schooner Bayou with the Intracoastal Waterway to the W of Vermilion Lock. In October 1995, the controlling depth was 8 feet in North Prong-Schooner Bayou. Schooner Bayou Canal is crossed by State Route 82 highway bridge 3.3 miles E of White Lake. The bridge has a swing span with a clearance of 6 feet. (See **117.1 through 117.59, and 117.494**, chapter 2, for drawbridge regulations.) An overhead power cable E of the bridge has a clearance of 95 feet.

(305) The entrance channel to the bayou from Vermilion Bay via Mud Point is no longer maintained and has a depth of about 2 feet. To enter by this route, follow the privately marked channel in the old Vermilion River entrance to the mouth of the bayou which is marked by a light.

(306) **Schooner Bayou Control Structure,** 4 miles inside the bayou, prevents saltwater from flowing through Schooner Bayou Canal into White Lake; the floodgates are 75 feet wide and 12 feet deep over the sill at mean low water. During high water the gates will be opened to permit passage of any vessel that can navigate against the current which can attain velocities of up to 5 knots. Vessels coming from E or W can bypass the floodgates by going through North Prong-Schooner Bayou into the Intracoastal Waterway SE of Forked Island.

(307) From Schooner Bayou Canal, the route crosses White, Turtle, Collicon, and Grand Lakes. Several lights and daybeacons mark this route. During the dry summer months, when farmers pump water to irrigate their rice fields, water in the lakes lowers enough to hamper navigation. In March 1996, the controlling depth was 4 feet from Schooner Bayou Control Structure through the lakes and connecting canals to Mermentau River.

(308) **White Lake** is 12 miles long and 6 miles wide, and has depths of 4 feet or more over a mud bottom. The E and W entrances to the lake are marked by lights, both aids being on the N side of the channel. The course across the lake passes about 0.5 mile off the point in the middle of the N shore of the lake. The channel is not marked.

(309) Approach the E entrance with the line of the Schooner Bayou Canal in range ahead. The channel is narrow, and the spoil bank on the S side is marked by stakes. At the W end of the lake, pass about 10 to 15 yards S of the light just off the canal entrance.

(310) **Turtle Lake** is nearly round, with a diameter of about 0.75 mile, and is shallow. **Alligator Lake** is about the same size and depth. **Collicon Lake** is 3 miles long, 1 mile wide, and from 2 to 4 feet deep. On the W side of this lake an earth dike extends along the N side of the channel. Keep close to this dike, within 5 to 10 yards of it.

(311) **Grand Lake** is from 4 to 7 feet deep, but the entrances are subject to shoaling. At the SE end of the lake, the entrance from Collicon Lake leads within 5 to 10 yards along the S side of an earthen dike. A light marks the outer end of the dike. There are lights on Umbrella Point and **Grassy Point** and on the E point at the entrance to the Mermentau River. From the Collicon Lake canal entrance, steer to pass about 0.5 mile off Short Point, the first point to the N, and about the same distance off **Umbrella Point,** the second point to N. From Umbrella Point, pass about 0.25 mile E of Grassy Point, and when beyond this point haul to W and pass well off the E point at the entrance to the Mermentau River, which is marked by a light. About 0.5 mile up the Mermentau River, the Intracoastal Waterway enters from E, follows the river for about 1 mile, and exits to W. The river channel is deep.

(312) A network of canals S from Schooner Bayou to Cheniere au Tigre and W to Pecan Island has been dredged through the marsh. **Sixmile Canal,** a 1.5-mile passage, leaves Schooner Bayou about 1.5 miles E of Schooner Bayou Control Structure and extends S to Freshwater Bayou Canal. **Belle Isle Bayou** enters Freshwater Bayou Canal about 5.3 miles S of Schooner Bayou.

(313) **Freshwater Bayou** and **Louisiana Fur Company Canal** enter Freshwater Bayou Canal from the W about 10 miles S of Schooner Bayou. Louisiana Fur Company Canal leads NW for about 1.7 miles thence W and N for about 5 miles to the private facilities at a large oil field S of Pecan Island. There is a fish camp near the oil company base at which gasoline, diesel fuel, ice, groceries, and a launching ramp are available.

(314) Other accesses to this network of canals is through **Deepwater Bayou** which enters Vermilion Bay about 1.5 miles S of Schooner Bayou, or through **Fearman Lake** with outlets to Vermilion Bay on either side of **Redfish Point.** Fearman Lake is shallow, and local knowledge is necessary to carry the best water.

(315) **Belle Isle,** W of Vermilion Bay, is a low ridge with most of the area under cultivation. The elevation is only slightly above that of the marsh. The headquarters of the Audubon Society Game Preserve is at **Audubon** on **McIlhenny Canal** at its junction with Belle Isle Bayou at the W end of Belle Isle Lake.

(316) **Cheniere au Tigre,** 4 miles S of Belle Isle, is a wooded ridge about 3 miles long with its E end on the Gulf Coast. The

12-foot elevation on the ridge is the highest natural elevation in the locality.

(317) **Pecan Island,** S of White Lake, is a long, wooded ridge about 10 feet high. **Pecan Island,** a village on the S end of **Pecan Island Canal,** has a few stores with limited supplies. Gasoline may be obtained by portage.

(318) **Pecan Island Canal,** a dredged channel, leads S from White Lake to Pecan Island. In July 1982, the reported controlling depth across the bar was 1 foot.

(319) **Charts 11348, 11345, 11344.–Mermentau River** empties into the Gulf of Mexico 86 miles W of Atchafalaya Bay Entrance E of Calcasieu Pass. The entrance channel shifts frequently and should be approached with caution. From the Gulf, the Mermentau leads E through **Lower Mud Lake** and Upper Mud Lake, thence N into the SW side of Grand Lake, out of the N end of Grand Lake to the Intracoastal Waterway and continuing on 32 miles through **Lake Arthur** to the head of navigation at the junction of **Bayou Nezpique** and **Bayou des Cannes,** where the river is formed.

(320) **COLREGS Demarcation Lines.**–The lines established for the Mermentau River are described in **80.835**, chapter 2.

(321) The preferred entrance to Mermentau River is through **Mermentau River Navigation Channel**, a jettied entrance and landcut about 6 miles SSE of the natural entrance to Lower Mud Lake. The marked channel leads N to join the natural channel at the upper end of Lower Mud Lake.

(322) Vessels should approach the jettied entrance to Lower Mud Lake from the Gulf through Lower Mud Lake Safety Fairway. (See **116.100 through 166.200**, chapter 2.)

(323) In 1982, the controlling depth was 3 feet through the natural entrance to the upper end of Lower Mud Lake.

(324) In May 2002, the controlling depths were 8 feet from sea through the jettied entrance channel, thence 8 feet through the marked channel in Lower Mud Lake, thence 4 feet to the State Route 82 highway bridge, thence 6 feet to Grand Chenier about 6 miles above the mouth of the river, thence 4 feet to the control structure at Catfish Point; thence in 1997, 3½ feet to and through Grand Lake, to the Intracoastal Waterway, thence 9½ feet through Lake Arthur to the junction of Bayous Nezpique and des Cannes. In March 1993, a visible wreck was reported near midchannel just above the intersection with the Intracoastal Waterway in about 29°58'24"N., 92°48'02"W.

(325) Numerous aids mark the channel in the Mermentau River N of the Intracoastal Waterway. Near the center of Lake Arthur the channel passes through a constriction known as **The Narrows.**

(326) The control structure across Mermentau River at Catfish Point, just below Grand Lake, has dikes and three gates to prevent the inflow of saltwater. The gates are opened for passing boats. Each gate opening is 56 feet wide; the depths over the sills are 15 feet for the two SE gates and 10 feet for the NW gate.

(327) The principal commodities carried by barge on the river are petroleum products, oil-well pipe casing, machinery, clays and drilling mud, sand, gravel, and crushed rock.

(328) Mermentau River is crossed by the following bridges; State Route 82 highway bridge has a swing span with a clearance of 13 feet (See **117.1 through 117.59 and 117.480**, chapter 2, for drawbridge regulations.). State Route 14 highway bridge at Lake Arthur has a fixed span with a clearance of 50 feet. A public launch ramp is just N of the bridge on the W side of the channel. Overhead power cables crossing the river above Lake Arthur have a least clearance of 50 feet.

(329) At Mermentau, the Southern Pacific railroad bridge with a swing span has a clearance of 10 feet and the U.S. Route 90 fixed highway bridge has a clearance of 44 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) Mariners should exercise extreme caution to prevent collision when approaching and navigating through the drawspan. Tows navigating through the drawspan shall not exceed one barge, and the towing vessels shall be made rigid abreast or astern of the barge.

(330) **Creole Canal** leads NW from the Mermentau River, about 1.3 miles above its entrance. A launching ramp, ice, and gasoline are available at a grocery store at the head of the canal. A reported depth of 3 feet could be carried to the facility in September 1972. Several oil company supply bases are near the State Route 82 highway bridge. Diesel fuel is available at a fuel dock on the E side of the canal about 0.3 mile below the bridge.

(331) **Grand Chenier,** a small settlement on the E side of the river between Lower and Upper Mud Lakes, has a highway connection to Lake Charles. Gasoline, water, and limited quantities of provisions are available in the village.

(332) **Lake Arthur,** a town on the NW side of Lake Arthur 13 miles above the Intracoastal Waterway, has highway and rail connections to Lake Charles. A depth of about 6 feet can be taken to the city pier at Lake Arthur. Gasoline, diesel fuel, lubricants, water, ice, and supplies are available in the town. A marina is on the S side of Lake Arthur, near **Laurents Point.** Gasoline, water, ice, camping, a launching ramp, and supplies are available at the marina.

(333) **Mermentau,** 16 miles above Lake Arthur, is a rice milling center that has railroad and highway connections with New Orleans and Lake Charles.

(334) **Port of Jennings,** on the W side of Mermentau River just below the railroad bridge, has slips with barge loading facilities, open storage areas for oil-well pipe casings and supplies, and rail facilities. Two shipyards in the port build tugs, crew boats, and barges. A marine railway at one of the yards can handle craft up to 250 feet for general repairs. Mobile cranes up to 60 tons, machine, metal, welding, and joiner shops are available.

(335) The town of **Jennings,** about 4 miles W of the port, is the center of natural gas production in SW Louisiana. It is also an important agriculture center in raising of rice and livestock, and in the production of fertilizer and cement from sea shells. Jennings has a hospital and is served by the Southern Pacific Railroad and several bus lines.

(336) From the head of Mermentau River, **Bayou Nezpique** and **Bayou des Cannes** were navigable for depths and distances as follows: Bayou Nezpique, 12 feet for about 6.1 miles to Interstate Route 10 highway bridge in April 1997, thence in 1963, 14 feet for 5.2 miles, thence 4 feet for about 11 miles; Bayou de Cannes, 11 feet for about 4 miles to the Interstate Route 10 bridge in April 1997, thence in 1963, 4½ feet for about 2.6 miles.

(337) Crossing Bayou Nezpique NE of Jennings are Interstate Route 10 twin fixed highway bridges with channel widths of 40 feet and clearances of 28 feet and State Route 97 highway bridge, which has a swing span with a channel width of 40 feet and a clearance of 8 feet. (See **117.1 through 117.59 and 117.482**, chapter 2, for drawbridge regulations.) Overhead cables at the swing bridge have a clearance of 39 feet, and an overhead power cable S of the twin bridges has a clearance of 61 feet.

(338) **Bayou des Cannes** is crossed at **Evangeline** by the twin fixed spans of Interstate Route 10, about 4 miles above the mouth with a 35-foot span and a clearance of 14 feet, and about 7.4 miles above the mouth by State Route 97 highway bridge with a 45-foot span with a clearance of 1 foot.

(339) **Bayou Plaquemine Brule** empties into Bayou des Cannes about 1 mile above Mermentau River. A channel leads E from the mouth of the bayou to near the town of **Crowley**. In April 1997, the controlling depth was 6 feet. The principal commodities carried on the bayou are shell and rice. Crowley has a large rice mill and elevator.

(340) A ferry crosses the bayou SW of **Egan.** The Southern Pacific railroad bridge crossing the bayou N of **Midland** has a swing span with a clearance of 5 feet. (See **117.1 through 117.59 and 117.489**, chapter 2, for drawbridge regulations.) A pontoon bridge crosses the bayou N of **Estherwood.** The bridge is operated by cables that are suspended just above the water when the bridge is being opened or closed. The cables are dropped to the bottom when the bridge is in the fully open position, but remain suspended while the bridge is fully closed. Extreme caution is advised in the area of the bridge. **Do not attempt to pass through the bridge until it is fully opened and the cables are dropped to the bottom.** (See **117.1 through 117.59 and 117.489**, chapter 2, for drawbridge regulations.) Overhead cables crossing the bayou have a least clearance of 50 feet.

(341) **Charts 11347, 11345, 11330.–Calcasieu Pass,** the outlet of Calcasieu Lake, is about 98 miles W of Atchafalaya Bay entrance and 78 miles E of Galveston entrance. It is the first and only deep-draft channel W of the Mississippi River and E of Sabine Pass.

(342) **Prominent features.–**In the vicinity of Calcasieu Pass are the range and jetties and, at night, the occulting red obstruction lights on the many radio towers in the area. A silver elevated water tank in Cameron and three tall microwave towers 1.5 miles E of Cameron are very conspicuous from seaward.

(343) **Vessels should approach Calcasieu Pass through the prescribed Safety Fairways.** (See **166.100 through 166.200**, chapter 2.)

(344) **COLREGS Demarcation Lines.**–The lines established for Calcasieu Pass are described in **80.835**, chapter 2.

(345) **Vessel Traffic Service, Lake Charles,** operated by the Lake Charles Pilots, has been established for the Port of Lake Charles and the Calcasieu Ship Channel. The service extends from Calcasieu Channel Lighted Whistle Buoy CC (29°20'00"N., 93°13'18"W.) to Interstate Route 10 bridge at Lake Charles.

(346) This **voluntary** Vessel Traffic Service (VTS) is designed to enhance navigational safety in the port and ship channel and provides vessels with information regarding the movements and intentions of other vessels within the VTS area at the time. Nothing in these rules will prevent owners or agents of vessels from making mutual agreements on the priority of certain vessels. This service is not intended in any way to supersede or alter applicable Navigation Rules.

(347) The working channels for the VTS are VHF-FM channels 66A and VHF-FM international radio channel 66. Vessels calling "VTS Lake Charles" shall give their name, length, beam, draft, destination, and ETA. Vessels entering the VTS area will be advised by VTS Lake Charles of the other traffic navigating within the area. All vessels shall advise VTS Lake Charles 2 hours before entering the system inbound, outbound, or maneuvering between points within the VTS. Movement of all vessels in the system will be on a first come, first served basis as vessels check into the VTS.

(348) Vessels shall report to VTS Lake Charles at the following positions:

(349) 1. When entering or leaving the Calcasieu Bar Channel, time and buoy number are reported.

(350) 2. Crossing the intersection of the Calcasieu Ship Channel and the Gulf Intracoastal Waterway (GIWW), time is reported.

(351) 3. Upon arrival or departure at the Port of Lake Charles, a terminal, or other destination, time is reported.

(352) 4. Dredges or other vessels working on the waterway will report to VTS Lake Charles daily and at any time they change location within the VTS area.

(353) 5. Vessels traveling in the Intracoastal Waterway and intending to cross or enter the ship channel should give a security call on VHF-FM channel 13, 30 minutes prior to crossing or entry and adjust speed so as to enter the river when the channel is clear.

(354) The following special conditions exist within the VTS area:

(355) 1. LNG, LPG, and vessels subject to special regulations shall navigate the system in accordance with the rules of the Captain of the Port's Office of the U.S. Coast Guard.

(356) 2. Vessels over 32 feet in draft shall not meet opposing traffic within the system above the jetties if their combined beam exceeds 50% of the channel project width.

(357) 3. Vessels awaiting the use of the channel because of fog, heavy weather, or any other cause restricting the channel will proceed inbound or outbound after the channel clears in the order they are listed with the system. Those waiting longest will clear first.

(358) 4. No vessel will be required to meet another vessel within the VTS area if, in the opinion of the master or pilot of either vessel, it would be hazardous to do so because of some special circumstance or condition.

(359) 5. Drilling rigs, submersibles, and other floating heavy equipment which must moor within the system and obstruct traffic to transfer, repair, or operate in any fashion shall obtain permission from the Captain of the Port's Office and advise "VTS Lake Charles" 24 hours in advance of their intentions, the procedures to be followed, and the amount of time the channel will be closed.

(360) 6. The Cameron Ferry monitors VHF-FM channels 13 and 16. Vessels transiting this area should contact the ferry for information as necessary.

(361) **Navigation Guidelines, Calcasieu River** –In recent years a substantial number of oceangoing vessels of increased size and draft have been entering the Calcasieu River Channel and proceeding to and from berths as far up the channel as the Port of Lake Charles. The channel, however, has not been appreciably widened in recent years. Based upon reported marine casualties to vessels and upon reports of navigational problems arising from the increased oceangoing traffic, and after consultation with local marine interests, the Coast Guard Captain of the Port (COTP) has developed certain guidelines to enhance safe navigation.

(362) It is recommended that all vessels, particularly those which must navigate in the channel because of draft constraints, hereafter referred to as **deep-draft vessels,** strictly adhere to

these guidelines. Nothing in them shall supersede nor alter any applicable laws or regulations.

(363) For purposes of these guidelines, **low-powered vessels** are those which are unable to maintain a speed of at least 8 knots through the water; **full-powered vessels** are those which are able to maintain 8 knots or more through the water. **Poor-handling vessels** are those which, because of steering characteristics, are unable to consistently navigate within the channel half-width. In all cases, vessels towed on a hawser are considered to be poor-handling vessels if the overall length of the tow exceeds 500 feet from the stern of the towing vessel to the stern of the tow. **Tandem tows,** except for small scows and nondescript vessels which operate outside the main channel, are unmanageable and should not be attempted.

(364) The entrance channel between the jetties is marked by Range A. Tides and currents should be obtained from the appropriate Tide and Tidal Current Tables. Vessels arriving at the bar should give a Security call on VHF-FM channel 13, 30 minutes before entering the jetties. So as not to delay river traffic, low-powered or poor-handling vessels intending to enter the river should be prepared to delay up to 45 minutes, if necessary, to allow full-powered and more maneuverable vessels to precede them through the jetties.

(365) During liquified natural gas (LNG)/liquid propane gas (LPG) movements in the Calcasieu River, special restrictions may be placed on this waterway by the local Coast Guard Captain of the Port. Copies of the local LNG/LPG Operations Plan may be obtained from the Port Arthur Coast Guard Marine Safety Office.

(366) **Areas of Particular Concern.**–Two areas in the Calcasieu River are considered to be particularly troublesome. These areas are listed in order of ascension when proceeding from sea.

(367) (1) **Monkey Island** (29°47.0'N., 93°20.8'W.). This area is used extensively by the fishing and offshore exploration industries. Numerous fishing and offshore exploration boats are homeported in this area. Vessels transiting this area may require speed reduction to reduce wake.

(368) (2) **Intracoastal Waterway** (30°05.5'N., 93°19.5'W.). This represents the point at which this waterway crosses the Calcasieu River Channel. This water is extensively used by tows. The situation is further complicated by an LNG facility located on the **Industrial Canal** which is serviced by deep-draft vessels. Tows intending to cross or enter the main river channel from the Intracoastal Waterway should give a Security call on VHF-FM channel 13, 30 minutes prior to entry and adjust speed so as to enter the river when the channel is clear. Every effort, including holding, should be made to avoid unduly restricting full-powered vessels, and allow them to clear this area when either inbound or outbound.

(369) A **regulated navigation area** has been established in Calcasieu River from the Calcasieu jetties to and including the Port of Lake Charles. (See **165.1 through 165.13 and 165.807**, chapter 2, for limits and regulations.)

(370) The Trunkline liquified natural gas facility on Industrial Canal is within a **safety zone.** Additionally, the waters surrounding non-gasfree LNG carriers transiting Calcasieu River are a **safety zone.** (See **165.1 through 165.7, 165.20, 165.23, and 165.805**, chapter 2, for limits and regulations.)

(371) **Channels.**–The Calcasieu entrance has been improved by jetties and a deepwater channel. The jetties extend seaward from the shoreline for about 1.1 miles and are mostly above normal high tide. A Federal project provides for a channel 42 feet deep across the outer bar from that depth in the Gulf to the entrance jetties, thence 40 feet through the jetties, thence to and in the Industrial Canal and turning basin N of Choupique Island, thence to the Port of Lake Charles wharves, and thence 35 feet to the Interstate Route 10/U.S. Route 90 highway bridge. (See Notice to Mariners and latest editions of charts for controlling depths.)

(372) The channel is marked by lights, lighted buoys, and a lighted midchannel whistle buoy at the entrance. A lighted **351°** 51.7' range leads across the bar between the jetties and into the pass.

(373) **Calcasieu Channel Lighted Whistle Buoy CC** (29°20'00"N., 93°13'18"W.) is equipped with a strobe light and a racon.

(374) **Anchorages.–Large vessels should anchor in Calcasieu Pass Fairway Anchorage, E of the safety fairway.** (See 166.100 through 166.200, chapter 2.) Vessels up to 12 feet in draft can obtain excellent anchorage in the bend in the river at Cameron. While waiting for daylight or fog to lift, ships can anchor out of the fairway anywhere in Calcasieu River. No anchorages exist in the landcuts, and ships entering cuts are expected to complete passage. In fog, deep-draft vessels should anchor 2 to 3 miles E of the pilot boarding station.

(375) **Dangers.–**Seaward of the jetties, a moderate to strong current sweeps across the channel, normally setting in a W direction; however, strong W winds will cause a current reversal; mariners should exercise caution and be on the alert. A mud slush lying on the bottom, approximately 6 feet above the hard surface, frequently will be found in the channel seaward of the jetties and at various places above the pass. This material can hardly be detected by the leadline. A 1- to 4-foot layer of soupy material, some 8 to 10 feet above the hard bottom and 20 to 23 feet below the surface, occasionally is encountered in the same localities.

(376) **Spoil banks** of undetermined depth exist on the W side of the entrance channel and outer channel except within a mile N and S of Calcasieu Channel Lighted Buoy 29, which area, the Lake Charles Pilots report, has been left clear for Pilot Station No. 1. Mariners are advised to avoid navigating across the spoil banks, because the actual depths may be considerably less than the charted depths.

(377) In 1981, a submerged obstruction was reported in the fairway anchorage W of the safety fairway in about 29°37.3'N., 93°27.7'W.

(378) **Tides and currents.–**Diurnal range of tide in Calcasieu Pass is 2.0 feet. Flood waters may increase the normal river level at Lake Charles 1.5 feet. There is little current in the river except during freshets.

(379) **Weather.**–The climate is humid subtropical with a strong maritime character. The climate is influenced to a large degree by the amount of water surface provided by lakes, bayous, flooded rice fields, and the proximity of the Gulf of Mexico. These areas modify relative humidity and temperature by decreasing the range of the extremes throughout the year. When S winds prevail, these effects are increased. When wind gradients are weak, a sea breeze is evident during the warmer part of the day. The area is also subject to occasional cold air masses during winter. In general, however, winters are mild, and cold spells are usually of short duration. Temperatures drop to freezing or below on about 14 days annually. This ranges from 3 to 32 days in individual years. Snow is negligible most of the time. However, in February

1895, a record snowstorm dumped 22 inches of snow at Lake Charles. Visibilities fall below 0.25 mile on about 50 days annually; October through March are the foggiest months. July is the warmest month with an average temperature of 83ºF and January is the coolest with an average temperature of 42ºF. The warmest temperature on record at Lake Charles is 103ºF recorded in August 1962 and the coolest temperature on record is 11ºF recorded in December 1989.

(380) The summer months are warm, although temperatures rarely exceed 100°F due to the marine influences and the assistance of afternoon showers and thunderstorms. While thunderstorms occur in every month, they are most frequent in July and August, when on one-half of the days in each month thunder is heard. Temperatures reach 90°F or above on an average of 74 days each season.

(381) Severe local windstorms, hailstorms, and tornadoes can occur in any season, but are most frequent in spring. Tornadoes and large damaging hail are unusual. Only one major tornado has been reported in Lake Charles, causing widespread damage but no fatalities. During the warmer months, small funnel clouds may be sighted at times. Some of these may reach the ground or water as twisters or waterspouts, but usually cause little or no damage. Since 1900, the centers of four hurricanes have passed very near Lake Charles. Other less intense tropical storms have also affected weather in the area. Since 1940, the strongest sustained wind was 69 mph. However, a wind of 90 mph can be expected about every 50 years, on average. The average annual rainfall at Lake Charles is 55.6 inches. June is the wettest with an average monthly rainfall of 5.6 inches while February and March are the driest months averaging 3.4 inches. The greatest 24-hour rainfall occurred in August 1962 when 10.22 inches was recorded.

(382) **Pilotage, Lake Charles.**–Pilotage is compulsory for all foreign vessels and U.S. vessels under register in foreign trade. Pilotage is optional for U.S. vessels of over 100 tons in coastwise trade that have on board a pilot licensed by the Federal Government. Arrangements for pilot service are usually handled through the ships' agents, by telephone (318-436-0372), or by radiotelephone on VHF-FM channel 66A. The pilot station on Monkey Island maintains a 24-hour lookout and monitors VHF-FM channels 16, 12, and 66A. The pilots carry portable radiotelephones and use VHF-FM channel 66A as working frequency. The pilot office in Lake Charles monitors VHF-FM channels 12 and 16. The pilot office stands by for pilot orders and for the Vessel Traffic Service. Traffic information can be obtained by any vessel using the traffic service. A 4-hour notice of time of arrival at one of the following designated pilot stations, where pilots will board, is requested.

(383) **Station No. 1, for vessels drawing 30 feet or less.**–In the entrance channel within 1 mile of 29°38.8'N., 93°19.5'W., and thence an area 1 mile wide extending 2.7 miles NNW on the E side of the channel to about 29°42.6'N. Small vessels should await the pilot in the NE corner of the boarding area.

(384) **Station No. 2, for vessels drawing between 30 and 35 feet.**–An area on the E side of the outer approach channel 1 mile wide and extending 2.5 miles NW and SE from 29°34'N., 93°16'W.

(385) **Station No. 3, for vessels drawing over 35 feet.**–A circular area within 1 mile of a point in 29°27.3'N., 93°13.4'W., and thence an area 1 mile wide extending 2.7 miles N on the E side of the channel to about 29°31.1'N.

(386) **Station No. 4, for vessels drawing over 35 feet which could touch bottom on the shoals outside the part of the channel marked by Calcasieu Channel Lighted Buoys 1, 2, 1A, and 2A.**–A circular area within 1 mile of Calcasieu Channel Lighted Whistle Buoy CC (29°20'00"N., 93°13'18"W.).

(387) **Note.–Vessels requesting a pilot to board at Stations 2, 3, or 4 will be charged an additional pilotage fee.**

(388) Vessels are taken to and from Lake Charles day or night. The Lake Charles Pilots have two boats, CALCASIEU PILOT and CALCASIEU PILOT II, each 55 feet long and blue with gray trim and the word PILOT on the cabin. The boats fly the International Code flag "P" by day and show the standard pilot lights at night.

(389) Vessels to be boarded should provide a safe lee and have a pilot ladder rigged amidships, 4 feet above the water.

(390) **Cameron,** the seat of Cameron Parish, is a fishing village on the E shore of Calcasieu Pass 2.5 miles above its entrance. The village has numerous oil-well supply bases, shrimp-packing houses, and a menhaden processing plant. Gasoline, diesel fuel, water, ice, and marine supplies are available; electrical and engine repairs can be made.

(391) Small craft may find berthing space or can anchor in the bend of the river near Cameron in depths of 12 to 30 feet. An auto ferry crosses the ship channel NW of Cameron. Another smaller auto ferry crosses the river at Cameron and connects Cameron with Monkey Island, which was formed by the river and ship channel. An overhead power cable with a clearance of 84 feet crosses the river at Cameron to Monkey Island. About 1 mile below Calcasieu Lake, Calcasieu River is crossed by another overhead power cable with a clearance of 54 feet.

(392) **Calcasieu Lake,** at the head of Calcasieu Pass, 6 miles from the Gulf, is 15 miles long, 3 to 5 miles wide, and 5 to 7 feet deep. The controlling depth off the entrance at the S end was reported to be 6 feet in July 1982. The controlling depth at West Pass, at the N end, was about 3 feet, but the lake bottom is so soft that slightly greater drafts can drag through. A row of piles marks the W side of the channel across the lake. Along the S end of the lake is an old revetment, partly submerged, extending about 1.5 miles E. The shore areas on the S and W sides of the lake are part of the **Sabine National Wildlife Refuge.**

(393) **Grand Lake,** a summer resort on the NE side of Calcasieu Lake, has numerous private piers.

(394) **Hackberry,** on the NW side of the lake, is an oil drilling center. Both towns have highway connections to Lake Charles.

(395) **Chart 11347.–Calcasieu River** and **Ship Channel.** N of Calcasieu Pass, the ship channel cuts across points of land along the W side of Calcasieu Lake to a junction with the Calcasieu River at **Choupique Island.** The channel is straight and well marked by lights and lighted ranges.

(396) The Intracoastal Waterway crosses the ship channel at the N end of Choupique Island, at the mouth of the **Calcasieu River,** and continues W through **Choupique Cutoff.** N of the intersection with the Intracoastal Waterway, **Industrial Canal** leads NE to a turning basin. From the junction with Industrial Canal, the ship channel follows the natural channel of Calcasieu River to the N side of **Moss Lake,** thence bypassing the river through a landcut about 1 mile long to the W bend of the river just above Haymark Terminal, thence in the natural channel to Rose Bluff, thence through **Rose Bluff Cutoff** and continuing on the same course through a cut across the S end of **Coon Island;** thence, the

E or right fork for about 1.5 miles to the port wharves at Port of Lake Charles. Deep water is along midchannel but, unlike most rivers, the deeper water often favors the points rather than the bends.

(397) **Calcasieu Landing** is on the W bank of the Calcasieu River just N of its junction with Choupique Cutoff. A shipyard here has two 2,000-ton floating drydocks which can handle ships up to 200 feet and barges up to 300 feet long and 55 feet wide with drafts of 14 feet for general repairs. A marine railway at the shipyard can handle vessels up to 200 feet. The yard builds tugs, crew boats, and barges up to 200 feet. There are metal, joiner, machine, and welding shops, a floating crane that can handle craft to 60 tons, and tank cleaning facilities. A fuel dock adjoins the shipyard. Diesel fuel is available on a 24-hour basis at the dock or in midstream by barge. The fuel facility monitors VHF-FM channels 13 and 16 continuously.

(398) **Haymark Terminal, Vincent Landing,** and **Rose Bluff** are sites of extensive oil refining, storage, and shipping facilities on the Calcasieu River below Port of Lake Charles. They are discussed later in this chapter under wharves at Port Charles. An overhead power cable with a clearance of 170 feet crosses the river 0.7 mile above Vincent Landing.

(399) A highway bridge at the N end of Rose Bluff Cutoff, about 1.5 miles below Port of Lake Charles, has a fixed channel span with a clearance of 135 feet.

(400) **Note.–**Considerable damage, including bank erosion, is being suffered by properties along the river, particularly in the vicinity of Vincent Landing and the S or lower portion of Moss Lake. The damage results principally from wave action of light tugs and light or partially loaded ships. (See **162.75 and 207.180**, chapter 2, for navigation regulations.) Mariners are directed to exercise every caution and to proceed at slow speed.

(401) **Bayou d'Inde,** branching W from Rose Bluff Cutoff, is crossed by State Route 108 highway bridge 3.7 miles above the cutoff. The bridge has a 38-foot removable span with a clearance of 8 feet. Just above it, the Kansas City Southern railroad bridge has a 33-foot removable span with a clearance of 6 feet. (See **117.1 through 117.59 and 117.441**, chapter 2, for drawbridge regulations.) Overhead power cables cross the bayou at all three bridges. The head of navigation on the bayou is 6.3 miles above the cutoff, which is 0.3 mile below Sulphur. In November 1995, the controlling depth was 9½ feet to the highway bridge.

(402) **Contraband Bayou** branches E from Calcasieu River just S of Port of Lake Charles deepwater terminals. An overhead power cable with a clearance of 48 feet crosses the bayou about 1.1 miles above the mouth. A highway bridge crossing the bayou about 1.6 miles above the mouth has a fixed span with a clearance of 15 feet. The twin fixed spans of another highway bridge with a clearance of 15 feet are 0.1 mile above the first bridge.

(403) A boatyard on the E side of the bayou just NW of the first highway bridge has a marine railway and mobile hoist that can handle vessels to 70 feet for hull and engine repairs. In November 1995, the controlling depth was 9 feet from the cargo wharves to the first bridge.

(404) A cut made across a narrow neck of land left a channel that forms a complete loop around **Clooney Island,** enabling vessels to turn around and head downstream. In February 1986, a submerged pipeline was reported to be extending from the shoreline into the channel E of Clooney Island, in about 30°13'30"N., 93°15'20"W. A dredged channel leads W off the NW side of the loop to a large alkali plant. A depth of about 18 feet can be carried to the first wharf in the channel, thence about 7 feet beyond the wharf.

(405) The **Port of Lake Charles,** about 32 miles from the Gulf, is opposite Clooney Island on the E bank of Calcasieu River and the N bank of Contraband Bayou. It is the only major port in W Louisiana. The principal imports are petroleum products, barite ores, and steel products. The principal exports are petroleum coke, petroleum products, chemicals, bulk and general cargo, paper and other wood products. Other commodities handled at the port are canned foods, caustic soda, synthetic rubber, plastics, paper products, and other general cargo.

(406) **Lake Charles,** the seat of Calcasieu Parish, is located around the E side of the lake about 34 miles from the Gulf. It is the center of large chemical, petroleum, natural gas, fish oil, synthetic rubber, salt, seafood, and rice industries. There is a small regional airport S of the city and two private airports. McNeese State University is here. Interstate Route 10 and U.S. Route 90, the main E-W highways, pass through the city, and U.S. Routes 165 and 171 lead N out of the city.

(407) **Towage.–**Several towing companies maintain offices at the Port of Lake Charles. Tugs up to 3,900 hp are available. Divers can be obtained.

(408) **Quarantine, customs, immigration, and agricultural quarantine.–**(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(409) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See U.S. Public Health Service, chapter 1.)

(410) There are several hospitals in Lake Charles.

(411) Lake Charles is a **customs port of entry.**

(412) **Harbor regulations.–**Federal regulations applicable to Lake Charles are those usually in force at most seaports of the United States. Local rules and regulations are enforced by a Port Director acting for the Board of Harbor Commissioners for the Port of Lake Charles, an agency of the State of Louisiana. The authority of the Commission extends from the N end of Calcasieu Lake N to Westlake.

(413) **Wharves.–**Lake Charles has more than 70 piers and wharves. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 21, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths for the facilities described are reported; for information on the latest depths contact the operator. Most of the facilities have highway and railroad connections, water, and electrical shore power.

(414) General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility.

(415) More than 856,000 square feet of covered storage and about 22 acres of open storage are available in the port. Mobile cranes up to 150 tons are available at the port.

(416) **N side of Industrial Canal:**

(417) Reynolds Metal Co. Wharf (30°06.06'N., 93°17.8'W.): 532 feet face, 940 feet with dolphins; 40 feet alongside; deck height, 15 feet; loading tower and conveyor, loading rate 800 tons per hour. 100-ton crawler crane with clamshell bucket, unloading rate 125 tons per hour; receipt of green coke, shipment of calcined petroleum coke, shipment of calcined petroleum coke and molded carbon anode blocks; owned and operated by Reynolds Metal Co.

(418) Trunkline LNG Co. Wharf (30°06.6'N., 93°17.4'W.): 1,300 feet of berthing space with dolphins and unloading, service, and bunkering platforms; 43 feet alongside; deck height, 16 feet; receipt of liquified natural gas, unloading rate 55,000 gallons per minute of LNG; owned by Lake Charles Harbor and Terminal District and operated by Trunkline LNG Co.

(419) **Haymark Terminal:**

(420) Calcasieu Refining Wharf (30°08.1'N., 93°19.3'W.): 380 feet of berthing space with dolphins; 20 feet alongside; deck height, 15 feet; receipt of crude oil, shipment of petroleum products; owned and operated by Calcasieu Refining Co.

(421) Shell Oil Co. Wharf (30°08.1'N., 93°19.1'W.): 480 feet of berthing space with dolphins; 20 feet alongside; additional 200 feet of berthing space with 15 feet alongside at rear of dolphins on upper side; deck height, 6 feet; shipment of crude oil; owned and operated by Shell Oil Co.

(422) **W side of Calcasieu River:**

(423) Lake Charles Gulf Calcining Plant Wharf (30°07.9'N., 93°19.9'W.): 100-foot face, 458 feet of berthing space with platforms; 38 feet alongside; deck height, 8 feet; shipment of petroleum coke; owned and operated by Gulf Oil Co.

(424) CONOCO Inc., Clifton Ridge Marine Terminal Wharf (30°09.4'N., 93°19.8'W.): 340 feet of berthing space with dolphins; 42 feet alongside; deck height, 12 feet; receipt and shipment of crude oil; owned and operated by CONOCO, Inc.

(425) Cities Service Pipe Line Co., Clifton Ridge Terminal, Tanker Wharf (30°09.5'N., 93°19.5'W.): 1,061 feet of berthing space with dolphins; 38 feet alongside; deck height, 11 feet; receipt and shipment of crude oil; owned by Cities Service Oil Co. and operated by Cities Service Pipeline Co.

(426) Dock B (30°10.5'N., 93°19.1'W.): 700-foot face, 900 feet with dolphins; 36 feet alongside; deck height, 12 feet; receipt of crude oil, shipment of petroleum products, bunkering vessels; owned and operated by Cities Service Co.

(427) Dock C: 300 yards N of Dock B; 660-foot face; 36 feet alongside; deck height, 12 feet; receipt of crude oil, shipment of petroleum products, bunkering vessels; owned and operated by Cities Service Co.

(428) Cities Service Co. Petrochemical PCD Dock (30°10.9'N., 93°18.8'W.): 280-foot face, 400 feet of berthing space with dolphins; 25 feet alongside; deck height, 10 feet; shipment of propylene and ethylene glycol; owned and operated by Cities Service Co.

(429) Dock D (30°11.0'N., 93°18.7'W.): 835-foot face; 36 feet alongside; deck height, 11 feet; shipment of petroleum products, liquid wax, lubricating oils, and ethylene glycol; owned by Cities Service Co., operated by Cities Service Co. and Cit-Con Oil Corp.

(430) Lake Charles Harbor and Terminal District, Bulk Terminal No. 1, Wharf No. 14 (30°11.5'N., 93°17.9'W.): 900-foot face, 1,200 feet with dolphins; 40 feet alongside; deck height, 14 feet; electric loading tower with chute and conveyor system, loading rate 1,000 tons per hour; ship/barge unloader, unloading rate 800 tons per hour of barite or 600 tons per hour raw coke; receipt of raw coke and barites; shipment of raw and calcined petroleum coke; owned and operated by Lake Charles Harbor and Terminal District.

(431) **Old River:**

(432) PPG A Dock (30°12.9'N., 93°16.9'W.): 125-foot face, 600 feet of berthing space with dolphins; 40 feet alongside; deck height, 8 feet; shipment of vinyl chloride and ethylene dichloride; owned and operated by PPG Industries, Inc.

(433) PPG B Dock (30°13.4'N., 93°16.8'W.): 390 feet of berthing space along upper and lower sides; 5 to 40 feet alongside; deck height, 5 feet; receipt and shipment of liquid chlorine; owned and operated by PPG Industries, Inc.

(434) PPG C Dock (30°13.4'N., 93°16.7'W.): 680 feet of berthing space with platforms; 40 feet alongside; deck height, 7½ feet; adjacent barge platform; 180 feet with platforms; 12 feet alongside; deck height, 7½ feet; receipt and shipment of liquid caustic soda, shipment of ethylene dichloride and chlorinated solvents; owned and operated by PPG Industries, Inc.

(435) **N side of Contraband Bayou,** all facilities owned by Lake Charles Harbor and Terminal District.

(436) Berth 10: 0.4 mile from Calcasieu River; 400-foot face, 900 feet with dolphins; 36 feet alongside; deck height, 14 feet; loading tower and traveling gantry shiploader, combined loading rate 25,000 bushels per hour from storage; shipment of grain; operated by Port of Lake Charles.

(437) Bulk Terminal No. 3 Wharf: 0.25 mile from Calcasieu River; 350 feet with dolphins; 36 feet alongside; deck height, 7½ feet; loading tower and conveyor system; shipment of rice and other grain; operated by Port of Lake Charles.

(438) Berths 8 and 9: junction of Calcasieu River and Contraband Bayou; 900-foot face; 36 feet alongside; deck height, 14 feet; berth 8 is an open cargo berth with 900 linear feet available; logs, large machinery, and project cargo are handled. Berth 9 has 50, 680 square feet covered storage; receipt and shipment of general cargo; operated by Lake Charles Harbor and Terminal District.

(439) **Port of Lake Charles,** all facilities owned and operated by Lake Charles Harbor and Terminal District.

(440) Berth 7: on Calcasieu River at junction of Contraband Bayou; 577-foot face; 36 feet alongside; deck height, 14 feet; 138,000 square feet covered storage; receipt and shipment of general cargo.

(441) Berths 4,5, and 6: 100 yards N of Berth 7; 1,600-foot face; 36 feet alongside; deck height, 14 feet; 256,000 square feet covered storage; receipt and shipment of general cargo.

(442) Berths 1,2, and 3: 100 yards NE of Berth 4; 1,600-foot face; 36 feet alongside; deck height, 14 feet; 214,000 square feet covered storage; receipt and shipment of general cargo and bulk liquids.

(443) Forest Products Wharf: 0.1 mile SE of Berth 1; 597-foot face, 850 feet with dolphins; 40 feet alongside; deck height, 16 feet; 194,000 square feet covered storage; receipt and shipment of general cargo, shipment of linerboard and other paper products.

(444) **W side of Lake Charles:**

(445) West Lake Terminal, Bulk Terminal No. 4, Wharf No. 13: 0.3 mile below Interstate Route 10 highway bridge; 250-foot face, 355 feet with dolphins; 35 feet alongside; deck height, 12 feet; two 60-ton cranes; receipt and shipment of calcined petroleum coke, receipt of barite ore, shipment of bulk and bagged ground barite by barge; owned by Lake Charles Harbor and Terminal District, operated by Lake Charles Harbor and Terminal District and Dresser Industries, Inc.

(446) Ideal Basic Industries Docks: 500 yards S of Bulk Terminal No. 4; two offshore parallel wharves with 950 feet of berthing space with dolphins; 21 feet alongside; deck height, 11 feet;

receipt of bulk cement; owned and operated by Ideal Basic Industries.

(447) **Cooney Island Loop:**

(448) Conoco Inc. Dock No. 1 (30°13.9'N., 93°15.4'W.): 650-foot face; 40 feet alongside; deck height, 15 feet; receipt of crude oil, shipment of petroleum products; owned and operated by Conoco Inc.

(449) Conoco Inc. Dock No. 2: 0.1 mile ESE of Conoco Inc. Dock No. 1; 425-foot face; 17 feet alongside; deck height, 14 feet; receipt of crude oil, shipment of petroleum products; owned and operated by Conoco Inc.

(450) Conoco Inc. Dock No. 3: 0.2 mile SE of Conoco Inc. Dock No. 1; 650-foot face; 40 feet alongside; deck height, 14 feet; receipt of crude oil, shipment of petrochemicals and petroleum products; owned and operated by Conoco Inc.

(451) ABC Wharf: 0.25 mile W of Conoco Inc. Dock No. 3; 32-foot face, 600 feet with dolphins; 30 feet alongside; deck height, 7½ feet; receipt and shipment of liquid caustic soda, shipment of ammonia; owned and operated by Olin Corp.

(452) **Calcasieu River above Interstate Route 10 bridge:**

(453) Port of Lake Charles Mooring: 700 yards N of Interstate Route 10 bridge; 400-foot natural bank face; 18 feet alongside; bank height, 5 feet; owned and operated by Lake Charles Harbor and Terminal District.

(454) Port of Lake Charles Mooring: 0.5 mile N of Interstate Route 10 bridge; 449-foot natural bank face; 18 feet alongside; bank height, 3 feet; receipt of limestone; owned by Lake Charles Harbor and Terminal District, operated by Gifford Hill and Co., Inc.

(455) Westlake Terminal Wharf: 0.8 mile N of Interstate Route 10 bridge; 200-foot face; 22 feet alongside; deck height, 5 feet; owned by Lake Charles Harbor and Terminal District.

(456) **Supplies.–**Marine supplies are available. Fresh water is available at most deep-draft wharves. Bunker fuels are available at several of the oil terminals and by barge from Port Arthur by prior arrangements.

(457) **Repairs.–**Lake Charles has no facilities for making major repairs or drydocking deep-draft vessels, the nearest such facilities are at Beaumont, Tex. Shipyards at Calcasieu Landing and on Contraband Bayou are available for making minor above-the-waterline repairs to vessels and hull and engine repairs to smaller vessels.

(458) **Communications.–**The Southern Pacific, Missouri Pacific, and Kansas City Southern Railroads serve the city. Continental Express, American Eagle, and L'Express Airlines have scheduled service from the Lake Charles Regional Airport. Several buslines and motor freight lines serve the city. Numerous steamship lines have scheduled service to all ports of the world. Several barge lines operate from the port.

(459) About 1 mile above the port docks, the river widens into **Lake Charles.** The lake is fairly circular and more than a mile in diameter. The city of Lake Charles fronts on the E shore. The river channel extends along the W side of the lake.

(460) **Small craft facilities.–**Berthage, electricity, gasoline diesel fuel, water, ice, marine supplies, a 35-ton hoist for hull engine and electronic repairs, and reported depths to 7 feet are available in facilities across the river from the Port of Lake Charles, NE of Berths 1,2, and 3. A facility on the N side of the lake provides berthage, water, and ice. Facilities on Contraband Bayou provide berthage, gasoline, diesel fuel, marine railway and 50-ton hoist for vessels to 90 feet for hull, engine and electronic repairs. Good anchorage is available in the lake in depths of 8 to 10 feet.

(461) **Westlake** is an industrial suburb of the city of Lake Charles on the W side of the Calcasieu River about 2 miles above the Port of Lake Charles wharves. U.S. Route 90 highway bridge that crosses the river and the N part of Lake Charles near Westlake has a fixed cantilever center span with clearance of 95 feet for a width of 380 feet and a clearance of 135 feet for the middle 200 feet of span. Just N of the highway bridge, the Southern Pacific railroad swing bridge has a clearance of 1 foot. The W opening is protected by a fender system and is the prescribed draw; any craft navigating the E opening does so at its own risk. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) About 0.2 mile above these bridges there is an overhead power cable with clearance of 110 feet.

(462) **Calcasieu River Salt Water Barrier,** about 2.1 miles above the Kansas City Southern railroad bridge at Westlake, prevents salt water from flowing upriver and interfering with irrigation of the rice lands during the growing season.

(463) The barrier consists of a 56-foot-wide navigation structure with a depth of 13 feet over the sill; a floodway control structure parallel to and immediately S of the navigation structure; and a dam on a loop of the river at Two O'Clock Point, about 3.9 miles above the floodway control structure.

(464) The dam prevents navigation upriver via the old river route. All traffic upriver is via the navigation structure. Mariners are cautioned not to pass through the floodway control structure under any conditions.

(465) The entrance channels to the navigation and floodway control structures are marked with large signs for the aid of navigation.

(466) The navigation and flood control structures are operated from 0600 to 2200 hours, 7 days a week. The control structure can be contacted on VHF-FM channel 14. Red and green lights and daybeacons are at each end of the navigation structure. Vessels should await the green signal before entering the navigation structure.

(467) An overhead power cable with a clearance of 136 feet crosses the river about 0.8 mile above the navigation structure.

(468) **West Fork** of Calcasieu River branches W about 0.9 mile above the navigation structure. In November 1995, the controlling depth in West Fork was 20 feet for 7 miles to its junction with Houston River, thence 13 feet for another 5 miles to the U.S. Route 90 fixed highway bridge at West Lake. Overhead power cables cross the fork about 3 miles above Calcasieu River, and a vertical lift bridge with a clearance of 14 feet down and 50 feet up crosses the fork about 4 miles above the river. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.) An overhead power cable is at the bridge. The U.S. Route 90 highway bridge, about 12 miles above Calcasieu River, has an 18-foot fixed span with a clearance of 10 feet.

(469) **Houston River** branches W from the West Fork of Calcasieu River. In November 1995, the controlling depth was 13 feet to the fixed highway bridge at **Anthony,** about 3.8 miles above the mouth. Overhead power cables with a least clearance of 61 feet cross the river about 1 mile above the mouth. The highway bridge at Anthony has a 17-foot fixed span with a clearance of 10 feet. The Kansas City Southern railroad bridge about 5 miles above the mouth has a swing span with a channel width of 27 feet and clearance of 6 feet. (See **117.1 through 117.59 and 117.457**, chapter 2, for drawbridge regulations.)

(470) **English Bayou** branches E from Calcasieu River about 1.9 miles above the navigation structure. U.S. Route 171 fixed highway bridge with a clearance of 14 feet crosses the bayou about 0.7 mile above its mouth. An overhead power cable with a clearance of 45 feet crosses the bayou just above the bridge.

(471) U.S. Route 171 fixed highway bridge with a clearance of 35 feet crosses Calcasieu River about 4.6 miles above the navigation structure.

(472) In December 1996, the controlling depth in Calcasieu River was 13 feet from Interstate Route 10/U.S. Route 90 bridge to the junction with **West Fork**, thence 6½ feet to **Point Fing** and to **Hecker**; above this point, the river is not navigable because of snags and trees.

(473) **Chart 11341.–Sabine Bank** is a succession of detached shoal spots parallel with and distant about 17 miles from the mainland. From the vicinity of Calcasieu Pass, the bank extends about 38 miles W to the vicinity of Sabine Pass and has several passages between the detached shoals. Depths on the shoals range from 16 to 30 feet and are subject to change.

(474) **Old Sabine Bank Light** (29°28'18"N., 93°43'24"W.), 30 feet above the water, is shown from a red conical tower on a cylindrical pier about midway of the bank. A lighted gong buoy, about 19 miles S of Calcasieu Pass, marks the E end of Sabine Bank.

(475) **Sabine Bank Channel** leads through Sabine Bank through a passage locally known as **Hole in the Wall.** This is the most used passage and is marked by lighted buoys. Sabine Bank Channel Lighted Whistle Buoy SB (29°25.0'N., 93°40.0'W.), equipped with a racon, marks the entrance channel. In February 1999, an obstruction was reported close SW of Sabine Bank Channel Lighted Buoy 1 in about 29°26'01"N., 93°40'09"W. The depth in the channel may be reduced as much as 3 feet during northers. The E part of the bank has a number of oil well platforms. They are lighted.

(476) To the S of Sabine Bank and about 6 miles inside the 10-fathom curve, the bottom is somewhat irregular and broken, and several spots with depths of 35 feet or less are surrounded by depths 10 to 20 feet greater. There is an unmarked 28-foot shoal about 12 miles SE of Sabine Bank Light. These shoals lie near the track line of vessels making the passage through Hole in the Wall from the SE.

(477) N of Sabine Bank, general depths are 33 to 40 feet. In July 1982, shoaling from 3 to 6 feet less than charted depths was reported within 6 miles of the beach between Calcasieu Pass and Sabine Pass.

(478) **Vessels approaching the passes and entrances to the ports, or bound along the Gulf Coast between Calcasieu Pass and Brazos Santiago, should proceed in the charted shipping Safety Fairways.** (See **166.100 through 166.200**, chapter 2.)